This section presents an analysis of the traffic impacts associated with the implementation of the Martis Valley Community Plan. The analysis focuses on the potential impacts to the roadway, transit, bicycle, and pedestrian systems in the Martis Valley portion of Placer County, the Town of Truckee and along State Route 267 south to Kings Beach. Traffic-related impacts are identified for the proposed land use diagram and each land use map alternative using the Town of Truckee's Transportation Model, which has been expanded to include the Martis Valley area. For each significant impact identified, potential mitigation measures are also identified to offset any significant impacts. All technical analysis related to this section is contained in **Appendix 4.4** and was prepared by LSC Transportation Consultants, Inc.

4.4.1 SETTING

The Martis Valley resides in a resort destination area that attracts tourists both during the summer and winter seasons. The area serves as a recreational and residential area, and also as a "gateway" between the Tahoe Region to the south and the Interstate 80 corridor to the north. As a result, traffic conditions in the area vary greatly over the seasons. Winter conditions can also create adverse driving conditions. The private automobile is the primary mode of travel in the area. Public and private transit services also serve the area, focusing on the Northstar-At-Tahoe ski area. Distance, roadway grades, and climate all make it difficult for non-motorized transportation to become a major mode of travel. However, the area does provide opportunity for bicyclists and hikers to enjoy these activities, if not for daily commuting purposes. A detailed description of the roadways in the study area is provided below.

ROADWAY SYSTEM

Interstate 80 (I-80)

Interstate 80 provides interregional highway connections east to Reno, Nevada and beyond, and west to Sacramento, California and the San Francisco Bay Area. The Martis Valley area lies to the south of I-80, 34 miles west of Reno and 90 miles east of Sacramento. This section of I-80 is currently a four-lane divided highway with limited truck climbing lanes, with speed limits posted at 65 mph. There are 5 interchanges serving Truckee on I-80. The peak month ADT along this roadway is approximately 40,000- 50,000 vehicles per day.

State Route 267 (SR 267)

State Route 267 (SR 267) is a 2-lane highway within the project vicinity, running in a general northwest-southeast alignment between Interstate 80 in Truckee and State Route 28 in Kings Beach. State Route 267 traverses southwesterly from Interstate 80 into downtown Truckee. Within downtown, capacity of this roadway is substantially limited by the existing unsignalized Bridge/Commercial Road intersection (where the SR 267 designation makes a 90-degree turn), as well as the existing at-grade crossing of the Union Pacific Railroad mainline. (This rail line currently serves roughly 21 trains per day.) From downtown Truckee, State Route 267 travels southeasterly across relatively level terrain to the base of a sustained grade near Northstar Drive up to an elevation of 7,199 feet at Brockway Summit. From Brockway Summit, the route descends 945 feet into the Tahoe Basin, ending at State Route 28 in Kings Beach. The route is of local and regional significance, providing access to residential, industrial, commercial and recreational land uses. It serves as the major access route between the Kings Beach and Incline Village

communities near Lake Tahoe on the south and the I-80 corridor to the north. It also serves as the sole existing access to the Northstar-At-Tahoe ski area and adjacent residential neighborhoods.

This highway consists of 2 travel lanes, with a speed limit of 55 miles per hour in the rural sections. A southbound truck-climbing lane is provided for a portion of the southbound grade north of Brockway Summit. Traffic signals are currently installed at the Palisades Drive intersection in Truckee, as well as at the SR 28 intersection in Kings Beach. All other intersections are controlled by stop signs on the side street approaches, with the exception of the "3-way stop" intersection at Bridge Street/Donner Pass Road, which is controlled by stop signs on the west, east, and south approaches only. The peak day average daily trips (ADT) along this roadway is approximately 14,000–16,000 vehicles per day.

State Route 267 Bypass

The State Route 267 Bypass, currently under construction, is planned to connect SR 89 North to the north of Interstate 80 and the existing SR 267 alignment near the Tahoe–Truckee Regional Airport to the south. This roadway, which is currently planned for completion in 2002, will allow regional traffic to travel between the Martis Valley and Tahoe Basin to the south with the I-80 corridor on the north without impacting downtown Truckee. A new diamond-configuration interchange will be constructed on Interstate 80 approximately ½ mile east of the existing SR 89 North/SR 267 interchange. Both ramp intersections will be controlled by traffic signals. With completion of the Bypass, the existing SR 89 North segment north of Interstate 80 will curve to the east to a new intersection with a straight alignment of SR 89 North and the SR 267 Bypass. From the south, the Bypass will curve to the east to a signalized intersection with existing SR 267 (Brockway Road) on the west and Joerger Drive on the east. (Caltrans plans identify this east approach as Soaring Way, which would be an extension of the existing roadway off of Airport Road. As plans for this extension have not been finalized and as land uses along Joerger Drive will be the sole traffic generators using this approach under current approved plans, this east approach is designated as Joerger Drive for purposes of this study.) Between this signal and the I-80 interchange, the Bypass will be constructed as a 2-lane access-controlled roadway.

For purposes of this study the SR 267 Bypass will be referred to as SR 267 and the existing SR 267 will be referred to as Brockway Road for the portion from Joerger Drive to West River Street. The north-south portion of the existing SR 267 that lies north of West River Street will be referred to as Bridge Street. East of Bridge Street, the existing SR 267 will be referred to as Donner Pass Road. One travel lane will be provided in each direction on the new Bypass, and traffic signals will be provided at the I-80 Eastbound, I-80 Westbound, and Old SR 267/Joerger Drive intersections. (Note: While SR 267 has a northwest/southeast alignment, it is considered to run northbound/ southbound for the purposes of this study).

State Route 89 (SR 89)

SR 89 is one of the 3 primary California routes that access Lake Tahoe (the other 2 are SR 267 and US 50), providing access between Donner Pass Road in Truckee and Tahoe City (the "SR 89 South" segment). Starting at the Interstate 80/SR 267 interchange on the east side of Truckee, "SR 89 North" serves as a rural 2-lane highway connecting Truckee with

Sierraville, Quincy, Mt. Lassen National Park and Mount Shasta to the north. The peak day ADT along this roadway is approximately 25,000 vehicles per day.

State Route 28 (SR 28)

State Route 28 is the major roadway serving Lake Tahoe's North Shore, linking SR 267 with Nevada to the east and Tahoe Vista and Tahoe City to the west. At the intersection with SR 267 in Kings Beach, SR 28 is a 4-lane facility with 2 lanes of travel in each direction. East of Kings Beach and west of Tahoe Vista, SR 28 is a 2-lane facility. The posted speed limit on this segment of SR 28 is 35 miles per hour. The peak day ADT along this roadway is approximately 25,000 vehicles per day.

Northstar Drive

Northstar Drive provides access from SR 267 westward to the Northstar-At-Tahoe Ski Resort and associated residential and commercial areas. It is generally a 2-lane configuration, with an eastbound left-turn lane at the stop-sign-controlled T-intersection with SR 267. Both northbound left-turn and southbound right-turn lanes are provided on SR 267 at this intersection. Additionally, a traffic control program conducted by Northstar-at-Tahoe in association with California Highway Patrol is in place on peak days of winter traffic. Posted speeds are 35 miles per hour. Residential street intersections along Northstar Drive are controlled by stop signs on the side street approaches. The winter peak day ADT along this roadway is approximately 10,000 vehicles per day.

Airport Road and Schaffer Mill Road

Airport Road is a 2-lane roadway providing the main access to the Truckee Tahoe Regional Airport, as well as other industrial and commercial businesses on the northeast side of SR 267. A center left-turn lane is provided along most of this roadway. Schaffer Mill Road (also 2 lanes) extends southwest from the same point on SR 267, providing access to the Lahontan residential development and other parcels not currently developed. The SR 267/Airport Road/Schaffer Mill Road is controlled by stop signs on the side street approaches, and is situated just southeast of the point where the SR 267 Bypass will connect to the existing SR 267 alignment. The peak day ADT along these roadways is approximately 3,000 vehicles per day.

Developers of the Lahontan community are currently designing improvements at the intersection to the satisfaction of the Department of Public Works (DPW) and Caltrans. These improvements will include auxiliary turn lanes, tapers, easements, lighting, striping and signage as required. The construction of the signal is being funded by the developers of Lahontan as part of their conditions of approval. However, the developer has the right to request a reimbursement agreement.

Palisades Drive

Palisades Drive is a local residential street, which provides 1 of 2 primary accesses to the Ponderosa Palisades neighborhood. It travels northward from Ponderosa Road to its terminus at the existing SR 267 (Brockway Road), which is a signalized intersection. (However, for purposes of this study, this roadway is assumed to run east/west in all LOS calculations and turning-movement volume tables because SR 267 is considered to run north/south.) The peak Average Daily Traffic (ADT) along this roadway is approximately 4,400 vehicles per day.

Martis Valley Road

Martis Valley Road is a local residential street, which provides 1 of 2 primary accesses to the Ponderosa Palisades/Sierra Meadows neighborhood. This roadway travels northeast from Ponderosa Drive to a 2-way stop-controlled intersection with the existing SR 267 (Brockway Road). The traffic levels on this roadway are relatively low (less than 4,000 vehicles per day) but delays for left-turn movements from Martis Valley Road to SR 267 northbound often occur during the A.M. peak hour.

West River Street

West River Street provides east-west access between SR 89 on the west side of Truckee and SR 267 (Bridge Street) in the downtown area. West River Street provides access to a number of industrial, commercial, and residential land uses located along the Truckee River. West River Street (along with the McIver Crossing underpass) provides a potential diversion route around the Bridge Street at-grade rail/highway crossing for northbound SR 267 traffic. The peak Average Daily Traffic (ADT) along this roadway is approximately 5,500 vehicles per day.

Donner Pass Road

For purposes of this study, Donner Pass Road is defined to begin west of SR 89 South and travel eastward to the eastern I-80 ramp intersection (SR 89/SR 267). While Donner Pass Road is currently considered to end at its intersection with SR 267, when the SR 267 bypass is completed, the roadway will be maintained by the Town of Truckee and named Donner Pass Road. This roadway provides a vital link for local circulation by connecting the Gateway Center area of Truckee to the historic downtown area. This roadway provides a single through lane in each direction, with a continuous center left-turn lane in the Hilltop and Gateway areas. The peak day ADT along this roadway is approximately 17,500 vehicles per day.

TRAFFIC SAFETY

Between 1990-1999, the California Highway Patrol reported a total of 701 automobile collisions along the entire length of SR 267. Injury accidents accounted for 35.9 percent of those collisions; 1.1 percent of those collisions involved fatalities. **Table 4.4-1** shows accident data by year.

California Highway Patrol has several safety concerns on SR 267 (Sattler, John. Public Affairs and Community Outreach Officer, California Highway Patrol). First, severe traffic congestion often occurs during peak season travel times northbound on SR 267 into downtown Truckee, and southbound on SR 267 over Brockway Summit to Kings Beach. Frustrated with the congestion on Brockway Summit, some motorists choose to pass slower cars in no-passing zones, which creates hazards in both northbound and southbound directions. Finally, CHP has noted a tendency for motorists to speed on SR 267 once they reach the Martis Valley Flats area just east of Truckee. The posted speed limit is 55 miles per hour, but the average speed traveled in this area is reported to be between 60 and 65 miles per hour, with some motorists well exceeding 65 miles per hour.

TABLE 4.4-1
TRAFFIC ACCIDENTS ON SR 267 (1990-1999)

	Total Accidents	Fatality Accidents		Fatalities	Injury Accidents		Injuries
Year	Number	Number	Percent	Number	Number	Percent	Number
1990	78	4	5.1%	4	24	30.8%	36
1991	47	1	2.1%	2	16	34.0%	29
1992	59	0	0.0%	0	25	42.4%	55
1993	70	0	0.0%	0	21	30.0%	29
1994	58	0	0.0%	0	22	37.9%	31
1995	91	1	1.1%	1	39	42.9%	56
1996	75	0	0.0%	0	22	29.3%	32
1997	68	1	1.5%	4	20	29.4%	38
1998	85	0	0.0%	0	37	43.5%	63
1999	70	1	1.4%	1	26	37.1%	46
Average	70.1	0.8	1.1%	1.2	25.2	35.9%	41.5
SR 267 10-Year Total	*701*	*8*	--	*12*	*252*	--	*415*
Accidents by Intersection	**Total Accidents**	**Fatality Accidents**		**Fatalities**	**Injury Accidents**		**Injuries**
	Number	**Number**	**Percent**	**Number**	**Number**	**Percent**	**Number**
I-80 Interchange	15	0	0.0%	0	9	60.0%	11
Northstar Dr.	10	0	0.0%	0	4	40.0%	9

Source: California Highway Patrol Information Services Unit Accident Records, 1990 through 1999.

Table 4.4-2 compares SR 267 average accident rates for 1990-1999 with California State, Placer County, and Nevada County averages for similar roadways. As noted in the Table, accident rates and injury/fatality accident rates are higher on SR 267 when compared with California and Placer County averages. In light of the relative hazards associated with driving in mountainous winter conditions, this comparison indicates that there is no undue traffic accident history for SR 267 as a whole.

TRAFFIC CONDITIONS AND OPERATIONS

The traffic analysis largely is based upon the Town of Truckee Transportation Model, which has been expanded to include the Martis Valley area. Details regarding the expansion of the model and calibration along the SR 267 corridor may be found in **Appendix 4.4**. The model has been developed for a typical P.M. peak-hour of the week during the summer peak season conditions (usually a summer Friday P.M. peak hour), as the Town of Truckee General Plan identifies the summer weekday P.M. peak hour as the design period for all traffic analyses in the Town. The winter analysis does not directly use the model to develop traffic volumes, but rather is based upon a process of factoring summer model output.

TABLE 4.4-2
ACCIDENT DATA COMPARISON
SR 267, STATE OF CALIFORNIA, PLACER COUNTY, NEVADA COUNTY

		Travel	Accidents			Victims		Rates		Fatalities
Location/Area	Road Miles	(MVM) (1)	Total	Injury	Fatal	Killed	Injured	Acc/MVM	F+I/MVM	/100 MVM
10 Year Average for State Route 267	12.7	42.5	70.1	25.2	0.8	1.2	41.5	1.65	0.61	1.88
California (5)										
Rural (Outside City) 2 & 3 Lane	7,759.9	10,666.1	12,975	5,932	399	483	10,366	1.22	0.59	4.53
Statewide 2 & 3 Lane	8,431.1	13,492.3	18,640	8,265	460	551	14,236	1.38	0.65	4.08
Statewide Total	15,185.7	144,140.9	141,240	51,767	1,524	1,774	84,186	0.98	0.37	1.23
Placer County										
Rural (Outside City) 2 & 3 Lane	67.9	241.0	288	125	2	3	195	1.20	0.53	1.24
Countywide Total	155.7	1,437.0	1,049	431	11	15	708	0.73	0.31	1.04
Nevada County										
Rural (Outside City) 2 & 3 Lane	62.4	131.3	232	109	7	7	176	1.77	0.88	5.33
Countywide Total	122.7	562.4	594	259	12	13	454	1.06	0.48	2.31

Note 1: MV = Million Vehicle Miles
Source: Based on 1994 Accident Data on California State Highway (Caltrans).

For this study, impacts on study roadways were determined by measuring the effect that project traffic has on traffic operations at key intersections and along roadways during the winter 30th highest winter peak and summer peak weekday P.M. peak-hour conditions. The following intersections and roadway segments were selected for analysis:

Study Intersections:

- SR 89/SR 267 Bypass/I-80 Westbound
- SR 89/SR 267 Bypass/I-80 Eastbound
- Donner Pass Road (Existing SR 267/SR 89)/I-80 Westbound
- Donner Pass Road (Existing SR 267/SR 89)/I-80 Eastbound
- Glenshire Drive/Donner Pass Road (Existing SR 267)
- Bridge Street/Donner Pass Road
- Bridge Street/West River Street
- Brockway Road (Existing SR 267)/Palisades Drive
- Brockway Road (Existing SR 267)/Martis Valley Road
- SR 267 Bypass/Brockway Road (Existing SR 267)/Joerger Drive
- SR 267/Airport Road/Schaffer Mill Road
- SR 267/Northstar Drive
- SR 267/SR 28
- SR 89/Donner Pass Road

The existing intersection configuration of these intersections is shown in **Figure 4.4-1**.

Insert figure 4.4-1, black and white 8.5x11

Roadway Segments:

- SR 89 North of Bypass
- Donner Pass Road (Existing SR 89) North of I-80 (East)
- Donner Pass Road (Existing SR 267) South of I-80 (East)
- Donner Pass Road (Existing SR 267) East of Bridge Street
- Donner Pass Road West of Bridge Street
- Bridge Street (Existing SR 267) South of Donner Pass Road
- Brockway Road (Existing SR 267) South of West River Street
- Brockway Road (Existing SR 267) South of Palisades Drive
- Brockway Road (Existing SR 267) South of Martis Valley Road
- SR 267 Bypass South of I-80
- SR 267 South of Brockway Road and SR 267 Bypass
- SR 267 South of Airport Road/Schaffer Mill Road
- SR 267 South of Northstar Drive
- SR 267 North of SR 28
- SR 28 East of SR 267
- SR 28 West of SR 267
- West River Street West of SR 267
- Palisades Drive West of SR 267
- Martis Valley Road West of SR 267
- Schaffer Mill Road West of SR 267
- Airport Road East of SR 267
- Northstar Drive West of SR 267
- SR 89 S South of Donner Pass Road
- Donner Pass Road East of SR 89 South
- Donner Pass Road West of SR 89 South

Level Of Service (LOS) Criteria

The analysis of intersections relies on qualitative measures known as level of service (LOS) to describe traffic operating conditions. LOS is a quantitative measure of traffic conditions on isolated sections of roadway and intersections. LOS ranges from "A" (with no congestion) to "F" (where the system fails with gridlock or stop-and-go conditions prevailing). **Table 4.4-3** provides a more detailed description of the LOS criteria used for this study. LOS conditions were evaluated using the methodologies documented in the *Highway Capacity Manual 2000* (Transportation Research Board, National Research Council, 2000), as applied in the Traffix software (Dowling Associates, Version 7.5). Computer output of detailed LOS calculations is provided in **Appendix 4.4** of this report. The specific LOS standards of the various jurisdictions in the study area are discussed in Section 4.4.2, below.

Historical Traffic Data

Traffic along the highways near the study area was obtained from *Traffic Volumes on California State Highways* (Caltrans, 1990-2000) as presented in **Table 4.4-4**. As shown, annual average daily traffic (ADT) has grown between 4.2 percent and 1.2 percent annually on average within the region. Relatively high growth has occurred on SR 267 near the Placer/Nevada County Line and on Interstate-80 near SR 267.

TABLE 4.4-3
DESCRIPTIONS OF LEVELS OF SERVICE

Descriptions of Levels of Service

The concept of Level Of Service (LOS) is defined as a qualitative measure describing operational conditions within a traffic stream, and their perception by motorists and/or passengers. A LOS definition generally describes these conditions in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety. Six levels of service are defined for each type of facility for which analysis procedures are available. They are given letter designations, from A to F, with LOS A representing the best operating conditions and LOS F the worst.

Level-Of-Service Definitions

In general, the various levels of service are defined as follows for uninterrupted flow facilities:

- **LOS A** represents free flow. Individual users are virtually unaffected by the presence of others in the traffic stream. Freedom to select desired speeds and to maneuver within the traffic stream is extremely high. The general level of comfort and convenience provided to the motorist, passenger, or pedestrian is excellent.

- **LOS B** is in the range of stable flow, but the presence of other users in the traffic stream begins to be noticeable. Freedom to select desired speeds is relatively unaffected, but there is a slight decline in the freedom to maneuver within the traffic stream from LOS A. The level of comfort and convenience provided is somewhat less than at LOS A, because the presence of others in the traffic stream begins to affect individual behavior.

- **LOS C** is in the range of stable flow, but marks the beginning of the range of flow in which the operation of individual users becomes significantly affected by interactions with others in the traffic stream. The selection of speed is now affected by the presence of others, and maneuvering within the traffic stream requires substantial vigilance on the part of the user. The general level of comfort and convenience declines noticeably at this level.

- **LOS D** represents high-density, but stable, flow. Speed and freedom to maneuver are severely restricted, and the driver or pedestrian experiences a generally poor level of comfort and convenience. Small increases in traffic flow will generally cause operational problems at this level.

- **LOS E** represents operating conditions at or near the capacity level. All speeds are reduced to a low, but relatively uniform value. Freedom to maneuver within the traffic stream is extremely difficult, and it is generally accomplished by forcing a vehicle or pedestrian to "give way" to accommodate such maneuvers. Comfort and convenience levels are extremely poor, and driver or pedestrian frustration is generally high. Operations at this level are usually unstable, because small increases in flow or minor perturbations within the traffic stream will cause breakdowns.

- **LOS F** is used to define forced or breakdown flow. This condition exists wherever the amount of traffic approaching a point exceeds the amount, which can traverse the point. Queues form behind such locations. Operations within the queue are characterized by stop-and-go waves, and they are extremely unstable. Vehicles may progress at reasonable speeds for several hundred feet or more, then be required to stop in a cyclic fashion. LOS F is used to describe the operating conditions within the queue, as well as the point of the breakdown. It should be noted, however, that in many cases operating conditions of vehicles or pedestrians discharged from the queue may be quite good. Nevertheless, it is the point at which arrival flow exceeds discharge flow, which causes the queue to form, and LOS F is an appropriate designation for such points.

Existing Traffic Volumes

Existing traffic volumes at the study intersections and along the study roadway segments were estimated for 2001 30th highest winter peak hour and summer peak weekday P.M. peak-hour conditions in the steps described below:

Summer Peak Weekday

1. Existing observed summer peak weekday counts were identified.

2. Caltrans observed count data (July 18, 2001) were increased by the historic peak month ADT annual growth rate on Caltrans highways to reflect 2001 peak month conditions.

3. Turning-movement volumes to and from SR 28 and I-80 were adjusted by the Peak Month ADT annual growth rate for these other roadways, as well, to estimate 2001 conditions.

4. Counts on Northstar Drive were validated by loop detector counts provided by Northstar-At-Tahoe ski area for July 2000. To correct errors in these counts, the loop detector counts were adjusted to reflect ratio of detector counts to observed manual counts conducted by Northstar staff on January 20, 2001 and February 18, 2001, as documented in the *Northstar-At-Tahoe 2000/2001 Ski Season Traffic Monitoring Report* (LSC, 2001), as presented in **Appendix 4.4**.

5. Volumes were balanced conservatively along SR 267, such that the greater through volume (from each turning movement volume or link volume) was used to balance the remainder.

30th Highest Winter Hour Winter Traffic Volumes

1. Available observed turning-movement volumes at the SR 28/SR 267 (January 1994) and SR 267/Northstar Drive (January, 2001) were evaluated.

2. Hourly count data provided by Caltrans for January 14th to 16th, 2000 at 3 separate count locations on SR 267 was evaluated. However, data for Friday, January 14th and Saturday, January 15th, SR 89 was not used, as parallel SR 89 was closed for a portion of the day and this data was therefore considered not to be representative of typical peak conditions.

3. It was determined that the most representative count data is provided by the count conducted on Saturday, January 20, 2001 at the Northstar Drive/SR 267 intersection. This day exhibited the 2nd highest eastbound peak-hour volume on Northstar Drive, as recorded by the Northstar Drive loop detectors. These counts were increased based upon a comparison of the peak eastbound hourly traffic volume on Northstar Drive on January 20, 2001 and the peak day, Friday, February 23, 2001 to reflect the peak day conditions.

4. A comparison was made between summer peak weekday and winter weekend peak hour traffic volumes at the SR 89 South/I-80 ramp intersections and the SR 89 South/Donner Pass Road intersection, based upon the winter traffic count data presented in the *SR 89 Corridor Study* (LSC Transportation Consultants, Inc, 2000)

TABLE 4.4-4
HISTORICAL TRAFFIC DATA ON CALIFORNIA HIGHWAYS WITHIN STUDY AREA

	State Route 267					Interstate 80		State Route 89		SR 28	
Year	South of Commercial/ Bridge in Truckee	South of Placer/ Nevada County Line	North of Northstar Drive	Brockway Summit	North of Kings Beach Jct. 28	East of 267	West of 267	South of I-80	North of I-80	East of 267	West of 267
Average Annual Daily Traffic Volumes											
1990	11,900	7,100	6,700	6,100	8,200	21,300	23,500	16,600	4,350	15,900	16,800
1991	12,500	8,600	7,300	6,700	8,000	23,100	23,500	16,600	5,300	17,100	16,800
1992	12,500	8,600	7,300	6,700	8,000	23,100	23,500	16,600	5,300	17,100	16,800
1993	12,500	8,600	7,300	6,700	8,000	23,100	23,500	17,200	5,300	17,100	16,800
1994	13,700	10,500	8,000	7,100	9,200	23,500	25,500	21,100	5,400	18,500	17,000
1995	13,700	10,500	8,000	7,100	9,200	23,000	25,000	20,900	5,400	18,100	17,000
1996	13,700	10,500	8,000	7,100	9,200	26,500	29,500	21,000	5,400	18,100	17,000
1997	15,400	11,500	8,700	7,600	9,200	26,500	28,000	21,000	6,300	19,400	18,400
1998	15,400	11,500	8,700	7,600	9,200	25,000	25,500	20,100	6,300	19,600	18,600
1999	15,400	11,500	8,700	7,600	9,200	29,500	30,000	20,600	6,300	19,100	18,100
2000	14,200	11,500	9,900	8,100	9,200	29,500	24,700	20,700	7,000	19,100	18,100
Change: 1991-2000	2,300	4,400	3,200	2,000	1,000	8,200	1,200	4,100	2,650	3,200	1,300
Total % Change	18.4%	51.2%	43.8%	29.9%	12.5%	35.5%	5.1%	24.7%	50.0%	20.1%	7.7%
Annual % Change AADT	*1.7%*	*4.2%*	*3.7%*	*2.6%*	*1.2%*	*3.1%*	*0.5%*	*2.2%*	*4.1%*	*1.9%*	*0.7%*
Peak Month Average Daily Traffic Volumes											
1990	15,100	9,100	8,600	8,100	10,500	29,000	31,000	21,100	6,400	22,100	22,500
1991	14,900	11,600	9,600	8,800	11,100	30,000	31,000	21,100	7,000	24,200	23,900
1992	14,900	11,600	9,600	8,800	11,100	30,000	31,000	21,100	7,000	24,200	23,900
1993	14,900	11,600	9,600	8,800	11,100	30,500	31,000	21,800	7,000	24,200	23,900
1994	16,900	13,800	10,200	9,200	11,900	31,000	34,000	25,500	7,400	24,200	23,900
1995	16,900	13,800	10,200	9,200	11,900	30,000	35,000	26,000	7,400	23,700	23,900
1996	16,900	13,800	10,200	9,200	11,900	34,500	40,500	23,000	7,400	23,700	23,900
1997	17,400	14,200	10,500	9,300	11,900	38,000	46,000	23,000	8,300	24,900	24,600
1998	17,400	14,200	10,500	9,300	11,900	37,500	42,500	22,600	8,300	24,700	24,400
1999	17,400	14,200	10,500	9,300	11,900	44,500	50,000	23,200	8,300	24,100	23,700
2000	16,100	14,200	11,400	9,900	11,900	31,000	41,000	24,600	8,800	24,100	23,700
Change: 1991-2000	1,000	5,100	2,800	1,800	1,400	2,000	10,000	3,500	2,400	2,000	1,200
Total % Change	6.7%	44.0%	29.2%	20.5%	12.6%	6.7%	32.3%	16.6%	34.3%	9.0%	5.3%
Annual % Change Peak Month ADT	*0.7%*	*3.7%*	*2.6%*	*1.9%*	*1.2%*	*0.6%*	*2.8%*	*1.5%*	*3.0%*	*0.9%*	*0.5%*
Peak Hour Traffic Volumes											
1990	1,800	1,100	*1,350*	970	1,650	3,100	3,600	2,400	600	2,100	2,200
1991	1,800	1,100	960	920	1,000	3,100	3,600	2,400	1,750	2,100	2,200
1992	1,800	1,100	960	920	1,000	3,100	3,600	2,400	1,750	2,100	2,200
1993	1,800	1,100	960	920	1,000	3,100	3,600	2,400	1,750	2,100	2,200
1994	1,800	1,400	790	720	880	3,100	3,600	2,600	900	2,100	2,200
1995	1,800	1,400	790	720	880	2,900	3,500	2,550	900	2,050	2,200
1996	1,800	1,400	790	720	880	3,550	4,100	2,700	900	2,050	2,200
1997	1,800	1,400	790	720	880	3,550	4,000	2,700	1,000	2,100	2,300
1998	1,800	1,400	790	720	880	3,550	2,400	2,600	1,000	2,100	2,300
1999	1,800	1,400	790	720	880	4,200	2,800	2,650	1,000	2,050	2,250
2000	1,400	1,400	1,450	1,150	880	3,500	2,800	2,400	830	2,050	2,250
Change: 1991-2000 (1)	-400	300	100	180	-770	400	-800	0	230	-50	50
Total % Change	-22.2%	27.3%	10.4%	19.6%	-77.0%	12.9%	-22.2%	0.0%	13.1%	-2.4%	2.3%
Annual % Change Peak Hour ADT	*-2.5%*	*2.4%*	*1.0%*	*1.8%*	*-13.7%*	*1.2%*	*-2.5%*	*0.0%*	*1.2%*	*-0.2%*	*0.2%*

Note 1: Outliers in 1990 at 267/Northstar Drive, 267/Jct. 28, and 89/North of I-80 are excluded from analysis.
Source: Traffic Volumes on California State Highways, 1990-2000. State of California Business, Transportation and Housing Agency. Department of Transportation.

and summer peak weekday P.M. peak-hour traffic volumes. Factors were developed using this data that compare winter weekend PM peak-hour volumes to summer peak weekday PM peak-hour volumes. For example, the winter traffic volumes turning left from SR 89 northbound to I-80 westbound were shown to be 291% of the summer peak weekday traffic volumes at the SR 89 South/I-80 westbound ramp. Therefore, a factor of 2.91 was applied to the summer turning-movement volume from SR 267 northbound to I-80 westbound to estimate winter turning-movement volumes.

5. The difference between peak-hour and 30th peak-hour traffic volumes was determined for both north and south directions. Count data was obtained from Northstar-at-Tahoe for eastbound peak-hour volumes on Northstar Drive for every day in the 2000/2001ski season. Hourly count data for January 20th, 2001 and February 18, 2001 was then evaluated to identify those days on which the second-highest hour was also within the top 30 hours for the year. By considering both the observed peak-hour volumes and the estimated second-highest volumes on peak days, the actual 30th highest winter peak hour volume along Northstar Drive was estimated.

6. The February 18, 2001 turning movement volumes were factored down to reflect the 30th highest winter peak hour. The difference in volumes was only applied to the eastbound traffic exiting Northstar in an effort to remain conservative (inbound PM peak-hour traffic to the ski area was assumed to remain at the peak winter volume). The decrease in traffic was applied, based upon existing observed traffic volumes during periods of peak ski area exiting traffic activity.

Once these factors were applied, turning movements at the intersections were balanced. The existing 2001 turning-movement volumes for the summer peak weekday P.M. peak hour and 30th highest winter peak hour are shown in **Figures 4.4-2** and **4.4-3**, respectively.

The existing peak season ADT was estimated by applying a factor to the peak-hour volume on each roadway. This factor was determined by reviewing daily traffic count data along various roadways in the Town of Truckee and Martis Valley from 1997 to the present. A peak hour-to-ADT factor was determined for each study roadway segment and applied to the estimated summer peak-hour traffic volumes to determine the 2001 ADT, with the following exceptions:

- The average of the ADT factor along SR 267 south of Bridge Street and at the County line was averaged and applied to all segments of SR 267 located between these two locations.

- The factor for Palisades Drive was assumed to equal that observed along Martis Valley Road.

- The factor along Northstar Drive West of SR 267 was based upon the data recorded as part of the Northstar Traffic Monitoring Program.

- The factor along Schaffer Mill Road was assumed to be equal to that along Northstar Drive.

- insert Figure 4.4-2, black and white 8.5x11

- insert Figure 4.4-3, black and white 8.5x11

- The factor along Donner Pass Road east of SR 89 South was increased from 10.6 (observed west of SR 89 South) to 12.0, to reflect the high level of commercial land uses along Donner Pass Road east of SR 89 South.

- The factor along Airport Road is based upon the average peak hour to ADT factor for Light Industrial, General Aviation, and General Office land uses as presented in the *Trip Generation Manual* (ITE, 1997).

Existing Level of Service (LOS)

The existing LOS at all the study intersections is summarized in **Table 4.4-5**. The roadway LOS was determined by applying the appropriate Nevada County (Town of Truckee) or Placer County standard to the peak-hour, peak-directional traffic volumes on each roadway or the ADT on each roadway. The resulting roadway LOS is summarized in **Table 4.4-6**.

TABLE 4.4-5
EXISTING INTERSECTION LOS (YEAR 2001)

Note: LOS shown in **bold** exceeds standard		Year:	2001	
		Roadway Network:	Existing	
		Land Use:	Existing	
		Design Period:	Summer	Winter
			Weekday	Weekend
Intersection	**Type of Control**		**LOS**	**LOS**
SR 89/SR 267 Bypass/I-80 Westbound	Traffic Signal	Total Intersection	--	--
SR 89/SR 267 Bypass/I-80 Eastbound	Traffic Signal	Total Intersection	--	--
DPR (Existing 267/89)/I-80 Westbound	Stop-Controlled	Worst Movement	**F**	**F**
		Total Intersection	B	A
DPR (Existing 267/89)/I-80 Eastbound	Stop-Controlled	Worst Movement	**F**	D
		Total Intersection	A	A
Glenshire Drive/DPR (Existing SR 267)	Stop-Controlled	Worst Movement	**F**	**F**
		Total Intersection	E	C
Bridge Street/Donner Pass Road	Stop-Controlled (2)	Worst Movement	**F**	**F**
		Total Intersection	**F**	E
Bridge Street/West River Street	Stop-Controlled	Worst Movement	**F**	**F**
		Total Intersection	E	**F**
Brockway Rd (Existing 267)/Palisades Dr		Total Intersection	B	B
Brockway Rd (Existing 267)/Martis Valley Rd	Stop-Controlled	Worst Movement	**F**	**F**
		Total Intersection	**E**	B
267Bypass/267/Brockway Rd (Existing 267)/Joerger Dr		Total Intersection	--	--
SR 267/Airport Road/Schaffer Mill Road	Stop-Controlled	Worst Movement	**F**	**F**
		Total Intersection	**F**	C
SR 267/Northstar Drive	Stop-Controlled (1)	Worst Movement	**F**	C
		Total Intersection	A	C
SR 267/SR 28		Total Intersection	B	C
SR 89 South/Donner Pass Road		Total Intersection	D	D

Note 1: Traffic control is provided at the SR 276/Northstar Drive intersection during the peak skier season.
General Note: The SR 267 Bypass was not in operation at the time of this traffic analysis.
DPR: Donner Pass Road

TABLE 4.4-6
EXISTING ROADWAY LOS FOR SUMMER CONDITIONS (YEAR 2001)

Roadway	Jurisdiction	Applicable LOS Standard	Peak Direction/ Peak-Hour Volume (per lane)	ADT	Roadway LOS
SR 89 North of Bypass	Truckee	D	—	—	—
SR 267 Bypass South of I-80	Truckee	D	—	—	—
Donner Pass Road (Existing SR 89) North of I-80 (East)	Truckee	D	421	6,590	A
Donner Pass Road (Existing SR 267) South of I-80 (East)	Truckee	D	640	13,160	A
Donner Pass Road (Existing SR 267) East of Bridge Street	Truckee	D	734	13,510	A
Donner Pass Road West of Bridge Street	Truckee	D	577	11,730	A
Bridge Street (Existing SR 267) South of Donner Pass Road	Truckee	D	844	14,510	A
Brockway Road (Existing SR 267) South of West River Street	Truckee	D	985	16,760	A
Brockway Road (Existing SR 267) South of Palisades Drive	Truckee	D	885	14,720	A
Brockway Road (Existing SR 267) South of Martis Valley Road	Truckee	D	900	13,920	A
SR 267 South of Brockway Road and SR 267 Bypass	Placer County	E	—	—	—
SR 267 South of Airport Road/Schaffer Mill Road	Placer County	E	688	11,030	D
SR 267 South of Northstar Drive	Placer County	E	654	7,980	D
SR 267 North of SR 28	Placer County	E	471	9,790	D
SR 28 East of SR 267	Placer County	E	925	16,100	E
SR 28 West of SR 267	Placer County	E	821	12,100	D
West River Street West of SR 267	Truckee	D	425	5,220	A
Palisades Drive West of SR 267	Truckee	D	294	4,380	A
Martis Valley Road West of SR 267	Truckee	D	278	3,910	A
Schaffer Mill Road West of SR 267	Placer County	C (1)	192	2,820	A
Airport Road East of SR 267	Placer County	C (1)	251	3,040	B
Northstar Drive West of SR 267	Placer County	C (1)	291	6,520	C
SR 89 S South of Donner Pass Road	Truckee	D	712	11,730	A
Donner Pass Road East of SR 89 South	Truckee	D	682	14,340	A
Donner Pass Road West of SR 89 South	Truckee	D	911	17,490	A

General Note: The SR 267 Bypass was not in operation at the time of this traffic analysis.
(1)The applicable LOS for County roadways is LOS C except within ½ mile of SR 267, for which it is LOS D.

TRANSIT SYSTEM

Truckee Trolley Winter Service

The main public transit service in place to serve the Martis Valley region is the Truckee Trolley, historically operated by Area Transit Management, Inc. (ATM, Inc.) under contract to the Town of Truckee (As ATM has recently indicated that it will no longer operate this service, the Town is currently retaining a new contractor). This free shuttle service runs during the peak ski season months, with 3 fixed routes: Truckee Depot to Northstar, Northstar to Kings Beach, and Truckee Depot to Sugar Bowl Ski Area. Hourly service is provided along SR 267 between downtown Truckee and Northstar between 7:00 AM and 5:30 PM; vehicles leave the Truckee Depot at the top of the hour and leave Northstar at

the bottom of the hour, with major stops at the Truckee Tahoe Airport, the Best Western Motor Inn, and the Regional Park. No service is provided between 1:00 PM and 2:00 PM. During the 1999-2000 ski season, the Trolley operated from November to April, carrying a total of 39,177 passengers. The majority of riders on the 2 Northstar routes were Northstar employees and guests, with employees comprising 69.5 percent of passengers, and guests 26.6 percent. Northstar provides employee housing near downtown Truckee, making the route between Northstar and the Truckee Depot a convenient transit option for Northstar employees. Operating from November to April, the Trolley carried a total of 43,633 passengers in the 2000-01 ski season and 45,424 passengers in the 2001-02 ski season. This indicates the ridership on the trolley has been increasing at an average of 8 percent per year.

Truckee Trolley Summer Service

~~ATM, Inc. also provides the Truckee Trolley summer service under contract to the Town of Truckee.~~ During the summer season, the Truckee Trolley provides service between the Truckee Tahoe Airport and the West End Donner Lake beach. The Truckee Trolley operates on an hourly basis between approximately 9:00 AM and 5:00 PM, with 8 round-trips per day, 7 days a week. One-way fare for the Truckee Trolley during the summer is $1.00, with a discounted fare for disabled patrons, seniors, and children between the ages of 5 and 15.

The Trolley provided 7,548 passenger-trips during the 1999 summer season, July through November. Peak months were July and August with 2,507 and 2,173 passengers. respectively. Of total ridership, 82 percent consisted of general public riders.

Lake Tahoe/Northstar Shuttle Service

During the ski season, Northstar Ski Area operates a free shuttle for employees and guests that runs between the ski area and North Shore along Highways 28 and 267. This route is served once per hour from 7:00 AM to 5:30 PM, except between 1:00 PM and 2:00 PM. The vehicle departs Northstar at 0:30 past the hour and departs Tahoe Vista at the top of the hour. During the 1999-2000 ski season, the shuttle transported 3,866 passengers (Paula Rachuay, Resort Planner, Northstar-At-Tahoe Ski Area. May, 2000)

Truckee Dial-A-Ride

The Town of Truckee also funds Dial-a-Ride, a demand-based transit service that provides door-to-door transport between Glenshire, Tahoe Donner and downtown Truckee. Customers call in advance to schedule a ride and pay a flat fare of 3 dollars per ride.

Dial-A-Ride transported 14,579 passengers, between July 1999 and April 2000. Seniors accounted for approximately 60 percent of the ridership, with disabled and wheelchair-bound passengers accounting for almost 26 percent, and general public making up the remaining 14 percent. Monthly ridership ranged from a high of 1,503 passengers in March to a low of 1,065 in April.

Greyhound Bus Lines

The unstaffed Amtrak Station/Truckee Intermodal Transit Center in downtown Truckee acts as the depot for Greyhound passengers. Greyhound operates 10 daily scheduled

departures from the Truckee Depot: 4 eastbound to Reno and 6 westbound to Sacramento.

Amtrak Thruway Service

In addition to 1 westbound and 1 eastbound passenger train (the *California* Zephyr) serving the Truckee Depot each day, Amtrak operates 5 buses daily along the Capitol Corridor, from Reno through Truckee to Sacramento. Passengers on this thruway service can connect with The Capitol s rail service in Sacramento, which runs to the Bay Area.

Tahoe Area Regional Transit (TART)

Tahoe Area Regional Transit (TART), operated by Placer County, does not currently provide service along SR 267, but does provide bus service between Truckee and Tahoe City via SR 89 South. This service is partially funded by the Town of Truckee. TART buses operate 7 days a week, 364 days a year (excluding Christmas), and run on roughly 2-hour headways between the Truckee Intermodal Transit Center in downtown Truckee and the Tahoe City "Y" area. One-way fare is 1.25 dollars. The 1-way disabled fare is 1 dollar, while all day passes are 3 dollars for adults and 2 dollars for children, senior citizens, and the disabled.

Shuttle Services to the Reno-Tahoe International Airport

Approximately 17 privately owned shuttle services operate in the Truckee/Martis Valley/Tahoe area, providing transportation between the area and the Reno-Tahoe International Airport in Reno, Nevada. Squaw Creek Transportation is arguably the most established of these services, operating standard shuttle service on the hour between the Resort at Squaw Creek in Squaw Valley, USA and the Reno Airport. Service runs from approximately 5:00 AM to 11:00 PM daily, with basic 1-way fares starting at 38 dollars, with lower group rates. Luxury and door-to-door service is also available.

RAIL SERVICES

The existing rail facilities through historic downtown Truckee extend along the I-80 corridor from the Bay Area to the west and to Reno, Ogden and beyond in the east. These facilities are owned and operated by Union Pacific Railroad. There is an un-staffed Amtrak station/Truckee Intermodal Transit Center in downtown Truckee that is used as a passenger pickup and drop off point for buses and shuttles, as well as for Amtrak trains. Passenger rail service is currently limited to 1 daily departure in each direction of the Amtrak *California Zephyr*, which runs from Oakland, California to Chicago, Illinois. However, Caltrans' *Rail Passenger Program Report* (Caltrans Rail Program, 1999) calls for expansion of *The Capitol*s rail service, currently operating between San Jose and Auburn, eastward to Truckee and Reno in 2004-05.

PARK-AND-RIDE FACILITIES

There are currently no officially designated Park-And-Ride facilities in the study area. Unofficial park-and-ride activity is observed to occur on the northern side of the SR 267/I-80 interchange.

Among the Transportation Control Measures listed in the Truckee General Plan (Town of Truckee General Plan, 1995-2014, 1996), the addition of Park-And-Ride lots within the

Town of Truckee is included in Circulation Policy 4.1 as another method Truckee would like to implement to promote efficient use of public transit.

BICYCLE AND PEDESTRIAN SYSTEM

At present, there are no designated pedestrian/bicycle routes along the SR 267 corridor through historic downtown Truckee and the Martis Valley. Limited pedestrian activity occurs within the area due to the dispersed pattern of land use. Bicycle activity is also limited within the area, with the exception of summer recreational trips. To access the Martis Valley region from downtown Truckee, cyclists must use the Truckee River crossing located on SR 267. From the North Shore of Lake Tahoe, SR 267 must be used to travel by bicycle to Truckee. This roadway has steep grades the hinder bicycle use.

The Town of Truckee is currently developing a master plan for trails and bikeways that preliminary would add signed bicycle corridors along Donner Pass Road, West River Street and SR 267 to the Placer County boundary near the Truckee Tahoe Airport (Ball, Gavin, April 2000). Placer County has plans to add five miles of off-road multipurpose trails between Northstar and the Truckee town limits, connecting with existing multipurpose trails in the area (Ramirez, John. May 2000). The reader is referred to Section 4.11 (Public Services) regarding existing and planned trail systems in the plan area.

4.4.2 REGULATORY FRAMEWORK

FEDERAL REGULATIONS

No federal documents were identified that addressed regulatory issues relating to the proposed project's impact on the transportation system.

STATE REGULATIONS

Caltrans

Caltrans owns, operates, and maintains much of the study area roadways, including I-80, SR 267, and SR 28. Specific regulatory conditions that relate to this analysis or the implementation of the proposed project are described below.

- *District System Management Plan*, Caltrans - District 3, August 1992: This document sets forth the policy direction for Caltrans - District 3 over the next 20 to 30 years. Nine policies and 15 action statements are presented, all intended to move toward achieving the District's principal goal:

  > *"... assure the economic vitality and quality of life for its population through a cohesive multi-modal, multi-jurisdictional, economical and environmentally sound transportation system to provide for mobility of goods, services, information, and people, in a safe and efficient manner."*

- *Transportation Concept Report - Interstate Route 80*, Caltrans - District 3, 1999: Route Concept Reports (RCRs) and Transportation Concept Reports (TCRs)are planning documents, which are intended to define the state's goal for a specific facility, in terms of LOS and the general magnitude of improvements. The I-80

Route Concept Reports states that the LOS for this interstate highway in rural areas (including the vicinity of the proposed project) should be LOS D (assuming traffic operations are unaffected by adverse weather). In addition, the "concept facility" is defined as a 6-lane facility, though only 4 lanes exist today. The RCR anticipates reduction in LOS to F by the year 2016, and proposes a series of improvements to mitigate some of these deficiencies. Among the proposals noted in the concept report is the reconstruction of the I-80/SR 89/SR 267 interchange and the addition of a 1.3-mile eastbound auxiliary lane between Truckee and the new interchange. The reconstruction of the I-80/SR 89/SR 267 interchange is currently in progress, and is scheduled for completion in 2002. The Department of Food and Agriculture plans to construct a new Agriculture Inspection Station adjacent to the westbound lanes on I-80 east of Truckee just west of the existing Truck Inspection Stations. When the new station is operational, the existing station will be closed. According to the concept report, the schedule calls for construction of the Agricultural Station by early June 2000. However, construction has not started yet. The concept LOS based on these improvements is LOS E.

- *Route Concept Report - State Route 267*, Caltrans - District 3, March 2001: This Route Concept Report identifies concept LOS D, E, and E on the portion of SR 267 in Nevada County, between the Nevada County line and Brockway Summit, and south of Brockway Summit, respectively. According to the concept report, the SR 267 Bypass is planned to be in place by 2002, which will improve the roadway LOS. However, the ultimate concept facility is planned to have a 4-lane cross-section along the bypass roadway. For the section from the Nevada County to Brockway Summit, the concept facility is a 2-lane conventional highway with southbound truck climbing lanes to Brockway Summit. However, the ultimate concept facility would have a 4-lane cross-section, as well. The concept facility of the segment located south of Brockway would include 8-foot shoulders, while the ultimate concept facility would contain 8-foot shoulders, as well as northbound truck climbing lanes. (Please note that Caltrans staff recently identified an error in the March 2001 SR 267 Transportation Concept Report. The Concept LOS was improperly identified in Table 1 of the Caltrans report. A revised copy will be available soon.)

- *Route Concept Report - State Route 28*, Caltrans - District 3, May 1997: This Route Concept Report identifies a concept LOS F on the portion of SR 28 near the proposed project. Members of the community requested that the Placer County Planning Department conduct a study of the reduction in the number of lanes on this segment (Kings Beach) from 4 to 3 lanes. This reduction in lanes would provide a continuous left turn lane in the median. Caltrans conducted a traffic analysis in December 1996. This analysis determined the proposed reduction in lanes would result in increased delays, longer queues, additional fuel consumption, and reduced quality in the level of service on the SR 28/SR 267 signalized intersection. The Tahoe Regional Planning Agency (TRPA) is the responsible regional transportation planning agency within the Tahoe Basin for transportation issues and takes the lead role in identifying transportation strategies and projects. As a result, Caltrans cannot guarantee that the overall facility will operate at any level of service better than LOS F. In 2001, Caltrans approved the Kings Beach Commercial Core Improvement Project PSR. The EIS/EIR is currently being prepared.

LOCAL REGULATIONS

Numerous regulations or policies of relevant jurisdictions apply to the transportation system within the study area. The study area encompasses three local jurisdictions, as follows:

- *Placer County:* Unincorporated portion of Placer County outside Tahoe Basin, including the SR 267/Airport Road-Schaffer Mill Road, SR 267/Northstar Drive and Northstar Drive/Big Springs Drive intersections;

- *Tahoe Regional Planning Agency:* Portion of Placer County located within Tahoe Basin, including the SR 267/SR 28 intersection; and

- *Town of Truckee:* Portion of the SR 267 corridor from a point just north of the Airport Road -- Schaffer Mill Road alignment, including the I-80 intersections, Bridge Street/Commercial Row, and New SR 267 Bypass/Old SR 267 intersection.

Placer County

Applicable policy documents were reviewed as part of this study to determine the significance of various impacts. Specific regulatory conditions that would relate to this analysis or the implementation of the proposed project are described below:

- According to the *Placer County General Plan Background Report*, the maximum daily traffic volume *per lane* for a rural 2-lane highway with flat terrain operating at LOS E or better is 12,500. Please note that this standard was applied to the section of SR 267 that is located south of Brockway Road and north of Northstar Drive.

- *Countywide Traffic Fee Program* (Placer County Department of Public Works, Transportation Division; July 2000): The Placer County Board of Supervisors adopted the Countywide Traffic Fee Program, requiring new development within the County to pay traffic impact fees. The fees collected through this program, in addition to other funding sources, allows the County to construct transportation facilities needed as a result of new development. The Martis Valley is part of the Tahoe/Resorts Benefit District. Roadway and intersection improvements in the area for the Tahoe/Resorts Benefit District consist of Northstar Drive/Big Springs Drive intersection signalization ($125,000 total cost), northbound passing lane along SR 267 at Brockway Summit ($1,000,000 total cost) and the SR 267 Bypass and miscellaneous improvements ($32,000,000 total cost). The fee each development is required to pay is based upon its Vehicle Miles of Travel (VMT) generated by the project as it compares to the VMT generation of a single-family dwelling unit, or a Dwelling Unit Equivalent (DUE). The fee per DUE in the Martis Valley is 2,355 dollars.

- Placer County DPW staff has indicated that, for purposes of this study, an Average Daily Traffic volume of 2,000 should be used as the standard for the maximum volume compatible with local residential street with front-on lots (e.g. Sierra Meadows/Ponderosa Palisades), as stated in a memo from Richard Moorehead dated 9/5/01.

- *Placer County General Plan Update - Countywide General Plan Policy Document* (Placer County, et al.; August 16, 1994): The Countywide General Plan Policy Document provides long-range direction and policies for the use of land within Placer County. With regard to the transportation and circulation system serving the project, this document establishes an overall roadway system including a roadway functional classification system and designates a series of transit corridors. In addition, six modal goals are presented, each of which is supported by numerous policies and implementation programs. A list of applicable General Plan provisions are provided below:

  Policy 3.A.1 The County shall plan, design, and regulate roadways in accordance with the classification system established in *Placer County General Plan* and reflected in the *Circulation Plan Diagram* contained therein.

  Policy 3.A.2 The County shall require that streets and roads be dedicated, widened, and constructed according to the roadway design and access standards generally defined in the Placer County General Plan and the County's Highway Deficiency Report. Exceptions to these standards may be necessary but should be kept to a minimum and shall be permitted only upon determination by the Public Works Director that safe and adequate public access and circulation are preserved by such exceptions.

  Policy 3.A.3 The County shall require that roadway rights-of way be wide enough to accommodate the travel lanes needed to carry long-range forecasted traffic volumes (beyond 2021), as well as any planned bikeways and required drainage, utilities, landscaping, and suitable separations.

  Policy 3.A.4 On arterial roadways and thoroughfares, intersection spacing should be maximized. Driveway encroachments along collector and arterial roadways, and to a lesser degree, collector roadways, shall be minimized. Access control restrictions for each class of roadway in the county are specified in Part I of the Placer County General Plan Document.

  Policy 3.A.5 The County shall require that through-traffic be accommodated in a manner that discourages the use of neighborhood roadways, particularly local streets. This through-traffic, including through truck traffic, shall be directed to appropriate routes in order to maintain public safety and local quality of life.

  Policy 3.A.6 The County shall require all new development to provide off-street parking, either on-site or in consolidated lots or structures.

  Policy 3.A.7 The County shall develop and manage its roadway system to maintain the following minimum levels of service (LOS).

  a. LOS "C" on rural roadways, except within ½ mile of state highways where the standard shall be LOS "D".

b. LOS "C" on urban/suburban roadways except within ½ mile of state highways where the standard shall be LOS "D".

The County may allow exceptions to these level of service (LOS) standards where it finds that the improvements or other measures required to achieve the LOS standards are unacceptable based on established criteria. In allowing any exception to the standards, the County shall consider the following factors:

- The number of hours per day that the intersection or roadway segment would operate at conditions worse than the standard.
- The ability of the required improvement to significantly reduce peak hour delay and improve traffic operations.
- The right-of-way needs and the physical impacts on surrounding properties.
- The visual aesthetics of the required improvement and its impact on community identity and character.
- Environmental impacts including air quality and noise impacts.
- Construction and right-of-way acquisition costs.
- The impacts on general safety.
- The impacts of the required construction phasing and traffic maintenance.
- The impacts on quality of life as perceived by residents.
- Consideration of other environmental, social, or economic factors on which the County may base findings to allow an exceedance of the standards.

Exceptions to the standards will only be allowed after all feasible measures and options are explored, including alternative forms of transportation.

Policy 3.A.8 The County's LOS standards for the State highway system shall be no worse than those adopted in the *Placer County Congestion Management Program* (CMP).

Policy 3.A.9 The County shall work with neighboring jurisdictions to provide acceptable and compatible levels of service and joint funding on the roadways that may occur on the circulation network in the Town of Truckee, the unincorporated area, and adjacent Nevada County.

Policy 3.A.10 The County shall strive to meet the level of service standards through a balanced transportation system that provides alternatives to the automobile.

Policy 3.A.11 The County shall plan and implement a complete road network to serve the needs of local traffic. This road network shall include roadways parallel to regional facilities so that the regional roadway system can function effectively and efficiently. Much of this network will be funded and/or constructed by new development.

Policy 3.A.12 The County shall require an analysis of the effects of traffic from all land development projects. Each such project shall construct or fund improvements necessary to mitigate the effects of traffic from the project. Such improvements may include a fair share of improvements that provide benefits to others.

Policy 3.A.13 The County shall secure financing in a timely manner for all components of the transportation system to achieve and maintain adopted level of service standards.

Policy 3.A.14 The County shall assess fees on new development sufficient to cover the fair share portion of that development's impacts on the local and regional transportation system. Exceptions may be made when new development generates significant public benefits (e.g., low income housing, needed health facilities) and when alternative sources of funding can be identified to offset foregone revenues.

Policy 3.A.15 Placer County shall participate with other jurisdictions and Caltrans in the planning and programming of improvements, as well as maintaining the adopted level of service (LOS), for the State Highway 267 in accordance with state and federal transportation planning and programming procedures, so as to maintain acceptable levels of service for Placer County residents.

Policy 3.B.1 The County shall work with transit providers to plan and implement additional transit services within and to the county that are timely, cost-effective, and responsive to growth patterns and existing and future transit demand.

Policy 3.B.3 The County shall consider the need for future transit right-of-way in reviewing and approving plans for development. Rights-of-way may either be exclusive or shared with other vehicles.

Policy 3.B.4 The County shall pursue all available sources of funding for transit services.

Policy 3.B.8 The County shall undertake, as funding permits, and participate in studies of inter-regional recreational transit services, such as rail, to the Sierra.

Policy 3.B.9 The County shall require development of transit services by ski resorts and other recreational providers in the Sierra to meet existing and future recreational demand.

Policy 3.B.10 The County shall consider the transit needs of senior, disabled, minority, low-income, and transit-dependent persons in making decisions regarding transit services and in compliance with the Americans with Disabilities Act.

Policy 3.B.11 The County shall support efforts to provide demand-responsive service ("paratransit") and other transportation services for those unable to use conventional transit.

Policy 6.G.2 The County shall continue and, where appropriate, expand the use of synchronized traffic signals on roadways susceptible to emissions improvement through approach control.

Policy 6.G.3 The County shall encourage the use of alternative modes of transportation by incorporating public transit, bicycle, and pedestrian modes in County transportation planning and by requiring new development to provide adequate pedestrian and bikeway facilities.

Policy 6.G.4 The County shall consider instituting disincentives for single-occupancy vehicle trips, including limitations in parking supply in areas where alternative transportation modes are available and other measures identified by the Placer County Air Pollution Control District and incorporated into regional plans.

Policy 6.G.5 The County shall endeavor to secure adequate funding for transit services so that transit is a viable transportation alternative. New development shall pay its fair share of the cost of transit equipment and facilities required to serve new projects.

Policy 6.G.6 The County shall require large new developments to dedicate land for and construct appropriate improvements for park-and-ride lots, if suitably located.

- *Martis Valley General Plan* (Placer County, 1975): The existing Martis Valley General Plan contains the following relevant goals:

  1. Establish improved access between Highway SR 267 and Interstate 80 in order to eliminate through traffic in downtown Truckee.

  2. Encourage methods of innovative mass transit into and within Martis Valley and the Lake Tahoe Basin.

  3. Encourage creative methods of dispersal of travelers to specific destination points from mass transit facilities.

Town of Truckee

Truckee General Plan (Town of Truckee, Community Development Department, Planning Division, adopted February 15, 1996): This document guides the overall growth and development of the Town of Truckee, which is located to the north of the proposed project. The plan's Circulation Element calls for the following goals and policies related to applicable Truckee circulation standards of significance:

- *Policy 1.6* Maintain a LOS D or better at weekday PM peak hour on arterial and collector road segments, and on primary through movements at intersections, in portions of the Town outside the Downtown Study Area.

- *Policy 1.7* Maintain a LOS E or better at weekday, PM peak hour on local, collector, and arterial road segments and on primary through movements at intersections within the Downtown Study Area. With regards to this traffic analysis, the Downtown Study Area includes locations along Donner Pass Road between Glenshire Drive and Bridge Street (inclusive) and along Bridge Street between West River Street and Donner Pass Road (inclusive); all other study intersections are outside of the Downtown Study Area.

  Note that this policy is applied to unsignalized intersections as a *whole*, rather than on individual approaches or turning movements. In addition, LOS is specifically considered for a summer peak weekday only.

The Truckee Town Engineer has indicated that the conclusions of the *Level of Service Criteria Study* (PRISM Engineering, December 2000, for the Nevada County Transportation Commission) should be used as guidance regarding the methodology associated with roadway capacity. According to this document, the maximum peak hour capacity per lane for a 2-lane highway operating at LOS D or better is 1,584, which was based partially upon factors presented in the 1997 Highway Capacity Manual (HCM, Transportation Research Board, 1997). The most recent 2000 HCM (Transportation Research Board, 2000) presents updated values for some of these factors. Per Placer County's request and the Town of Truckee's Public Works director's preliminary approval, the methodologies used in *Level of Service Criteria Study* were updated to reflect the more recent factors presented in the HCM (Moorehead, 2002).

The primary difference between the 2 methodologies is that the 2000 HCM identifies a lower value of Passenger Car Equivalents (PCEs) per truck along rolling terrain than the 1997 HCM. The reduction in this factor reflects the improved acceleration and deceleration characteristics of more modern trucks, which reduce the impacts of an individual truck on overall traffic flow. Applying these revised values, the capacity of the SR 267 Bypass (at the Town's LOS standard of D) is 1,891 vehicles per hour per lane. For comparison, as a part of the *SR 89 South Intersection Improvement Analysis* (LSC, 2000) a peak-hour peak-direction traffic count through the "Mousehole" railroad Undercrossing in Truckee was performed on February 21, 2000. The maximum observed southbound volume was 2,025 vehicles per hour per lane, indicating that 1,891 vehicles per hour per lane could be accommodated along the roadway links of the SR 267 Bypass, which will contain wider lanes and shoulders than are currently provided through the "Mousehole."

Please note that the *Level of Service Criteria Study* provided an analysis of 2-lane (and not four-lane) highways within Nevada County. Therefore, consistent with the methodologies presented in the *2000 Highway Capacity Manual*, the LOS of a four-lane roadway is dependent upon the percent of traffic that uses each lane. It was, therefore, assumed that if SR 267 is a 4-lane roadway, 60 percent of the traffic in each direction will use 1 lane and 40 percent would use the other.

Town of Truckee Development Code, Truckee Municipal Code, Title 18 (Town of Truckee, Effective November 6, 2000): This document provides most of the Town's requirements for the development and use of private and public land, buildings and structures within the Town. Section 18.20.020: Access states the following:

> *For intersections with an acceptable level of service (D or better outside the Downtown Study Area (DSA), E or better inside DSA), the project (existing plus*

project traffic) decreases the level of service of the total intersection to an unacceptable level (E or F outside DSA, F inside DSA area). The significant impact may be reduced to a less than significant level by incorporating intersection improvements and other mitigation into the project, which improves level of service to an acceptable level.

For intersections with an unacceptable level of service, the project increases the total traffic volumes of the intersection 5percent or more above existing traffic volumes. The significant impact may be reduced to a less than significant level by incorporating intersection improvements and other mitigation into the project, which maintains the level of service of the intersection at pre-project levels.

Town of Truckee AB1600 Traffic Fee Program (Town of Truckee, August, 1999): The Town of Truckee maintains a Traffic Fee Program much like Placer County's, which requires new development within the Town to pay traffic impact fees. The fees collected through this program, in addition to other funding sources, allows the Town to construct transportation facilities needed as a result of new development. The fee each development is required to pay is based upon its Vehicle Miles of Travel (VMT) generated by the project as it compares to the VMT generation of a single-family dwelling unit, or a Dwelling Unit Equivalent (DUE). The current fee per DUE is 1,936 dollars. Relevant roadway and intersection improvements that are fully or partially funded by the fees collected as a part of this program include Tahoe Donner Connector ($6,035,000 total cost), Glenshire/SR 267 capacity improvements ($600,000 total cost), Bridge Street/Union Pacific Railroad improvements ($450,000 total cost), Easterly Railroad Undercrossing ($6,000,000) and the Easterly River Crossing (cost not determined).

Tahoe Regional Planning Agency

Regional Transportation Plan - Air Quality Plan (RTP- AQP) for the Lake Tahoe Region (Tahoe Regional Planning Agency, 1995): The purpose of the Regional Transportation Plan - Air Quality Plan (RTP-AQP) is to attain and maintain the Environmental Threshold Carrying Capacities (thresholds) established by TRPA in 1982, and all applicable federal, state, and local standards established for transportation and air quality. To meet the goals of the Transportation Element, peak-period traffic flow should not exceed:

- LOS C on rural scenic/recreational roads;
- LOS D in rural developed areas;
- LOS D on urban roads; or
- LOS D for signalized intersections.
- LOS E may be acceptable during peak periods not to exceed four hours per day.

This document does not identify a peak traffic period such as summer peak weekday or winter weekend. Currently, TRPA does not have a specific adopted standard for unsignalized intersections.

4.2.3. IMPACTS AND MITIGATION MEASURES

STANDARDS OF SIGNIFICANCE

The CEQA Guidelines states that a project will be expected to result in a significant transportation and circulation impact if it causes an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system. For the purpose of this EIR, impacts are considered to be significant if the following could result from the implementation of the proposed project:

1) Project implementation would increase traffic and degrade the LOS of roadways or intersections from acceptable to unacceptable conditions or exacerbate conditions that are already at an unsatisfactory level. These standards are presented in Section 4.~~1~~4.2, above;

2) Project traffic would exacerbate conditions at a facility operating at lower than minimum standards without the project (as defined in the various policies presented in Section 4.~~1~~4.2, above);

3) Project implementation would increase traffic volumes on local residential streets with front-on lots to over 2,000 average daily trips;

4) Project implementation would conflict with adopted related goals, objectives, and policies of the Town of Truckee General Plan, Placer County General Plan, or the Regional Transportation Plan - Air Quality Plan (RTP- AQP) for the Lake Tahoe Region;

5) Project implementation would result in inadequate parking capacity; or

6) Project implementation would conflict with transit, pedestrian and bicycle uses.

These criteria are consistent with, or more conservative than, the adopted policies or thresholds of Caltrans, Placer County, Tahoe Regional Planning Agency, and the Town of Truckee. Other transportation-related issues (including impact on air traffic patterns and emergency access) are addressed in other sections of this environmental document.

A summary of standards of significance for the various roadway elements in the study area is presented as **Table 4.4-7**.

The reader is referred to Section 4.1 (Land Use) and Section 4.3 (Human Health/Risk of Upset) associated with potential conflicts with the Truckee-Tahoe Airport.

ASSUMPTIONS

This analysis is predicated upon the following assumptions:

- Land uses will develop in accordance with the densities discussed in the "Methodology" Section, below.

- The proportion of residences used as primary homes versus recreational homes will be in accordance with those proportions identified in "Methodology" Section, below.

- The Town of Truckee General Plan land uses will be built out by 2021.
- There will be no substantial shifts in general travel characteristics (such as the proportion of travel accommodated by the various travel modes) over the coming 20 years: factors such as fuel prices or air quality plans will not substantially impact current travel patterns within or external to the study area.

TABLE 4.4-7
LEVEL OF SERVICE STANDARDS

Roadway Element	Level of Service Standard		Source	Notes
	Summer	Winter		
Intersections				
SR 89/SR 267 Bypass/I-80 Westbound	D	None	Town of Truckee General Plan	Based on total intersection delay
SR 89/SR 267 Bypass/I-80 Eastbound	D	None	Town of Truckee General Plan	Based on total intersection delay
Donner Pass Road (Existing SR 267/SR 89) / I-80 Westbound	D	None	Town of Truckee General Plan	Based on total intersection delay
Donner Pass Road (Existing SR 267/SR 89) / I-80 Eastbound	D	None	Town of Truckee General Plan	Based on total intersection delay
Glenshire Drive/Donner Pass Road (Existing SR 267)	E	None	Town of Truckee General Plan	Based on total intersection delay
Bridge Street/Donner Pass Road	E	None	Town of Truckee General Plan	Based on total intersection delay
Bridge Street/West River Street	E	None	Town of Truckee General Plan	Based on total intersection delay
Brockway Road (Existing SR 267) / Palisades Drive	E	None	Town of Truckee General Plan	Based on total intersection delay
Brockway Road (Existing SR 267) / Martis Valley Road	D	None	Town of Truckee General Plan	Based on total intersection delay
SR 267 Bypass/SR 267/Brockway Road (Existing SR 267)/Joerger Drive	D	None	Town of Truckee General Plan	Based on total intersection delay
SR 267/Airport Road/Schaffer Mill Road	E	E	Placer County Congestion Management Program	–
SR 267/Northstar Drive	E	E	Placer County Congestion Management Program	–
SR 267/SR 28	D	D	TRPA Regional Transportation Plan/Air Quality Plan	Up to 4 hours per day of LOS E may be acceptable
SR 89 South/Donner Pass Road	D	None	Town of Truckee General Plan	Based on total intersection delay
Roadway Links				
SR 267 North of Brockway/267 Bypass Intersection	D	None	Town of Truckee General Plan and NCTC Level of Service Criteria Study	Capacity of 1,891 peak-hour traffic volume per lane
SR 267 South of Brockway/267 Bypass Intersection and North of Northstar Drive	E	E	Placer County Congestion Management Program	Capacity of 12,500 ADT per lane for level terrain
SR 267 South of Northstar Drive	E	E	Placer County Congestion Management Program	Capacity of 10,500 ADT per lane for rolling terrain
Arterials within Placer County	C (1)	C (1)	Placer County Congestion Management Program	Capacity of 8,100 ADT per lane for LOS D and 7,200 ADT per lane for LOS C

Note: If worst movement LOS at an unsignalized intersection in Placer County is equal to LOS F a signal warrant analysis is used to determine if mitigation is required.
(1) The applicable LOS for County roadways is LOS C except within ½ mile of SR 267, for which it is LOS D.

METHODOLOGY

The discussion below describes the steps that were followed in estimating the transportation conditions that would result from the proposed land use diagram and 2 land use map alternatives under various roadway improvement options. The methodology consists of 3 steps. First, the Town of Truckee Transportation Model was expanded to include the Martis Valley region and the model was calibrated to existing 2001 summer conditions. Next, the land use quantities associated with each land use map alternative were estimated, as well as appropriate trip rates for each land use. Finally, the transportation model was run for each land use map alternative and roadway improvement options to estimate summer peak weekday PM peak-hour traffic volumes. These numbers were then adjusted to best represent typical winter weekend peak-hour conditions (30th highest winter peak hour). ADT volumes were then estimated from the peak hour volumes.

Expansion of the Town of Truckee Transportation Model

The Town of Truckee maintains a town-wide travel demand model using the TMODEL2 software. The purpose of this model is to simulate peak-hour summer traffic flow in Truckee based upon the roadway network and land uses contained in the town. First, the 1995 land use numbers that are contained in the Town of Truckee model were updated to reflect any new development that has occurred along the SR 267 corridor since the last model calibration in 1995, in order to reflect existing 2001 conditions. The model was next expanded to include the Martis Valley region. A total of 36 Traffic Analysis Zones (TAZs) were added to the network, as well as the existing roadways and possible future roadways that would gain access to new development. All existing Martis Valley land uses were inventoried and added to the model. The model was run and compared to known 2001 turning-movement volumes in order to calibrate the model. A more detailed explanation of this process may be found in **Appendix 4.4**.

Estimation of Land Use Quantities

While the Community Plan land use description provides acreage and allowed residential densities, the traffic model requires the quantification of building floor area (for commercial uses) or number of dwelling units (for residential uses). Accordingly, it was necessary as the first step in the traffic analysis to determine the future number of dwelling units and square feet of commercial or office space in each TAZ. Please note that the following golf course characteristics were assumed for each land use alternative:

1. Lahontan 1 (18-hole) -- existing
2. Lahontan 2 (9-hole) -- existing
3. Northstar (18-hole) -- existing
4. Eaglewood (18-hole) -- proposed
5. Hopkins Ranch (18-hole) -- proposed
6. Siller Ranch (18-hole and 9-hole) -- conceptually proposed
7. Waddle Ranch (18-hole) – conceptually proposed

The methodology used in determining the number of single-family and multi-family residential units, as well as the square footage of office and commercial uses, in each TAZ for each land use map alternative is described below. This methodology and associated assumptions were developed based upon direction provided by the Placer

County Planning Department. The resulting land use quantities by TAZ for each of the Community Plan alternatives are presented in **Appendix 4.4**.

Proposed Land Use Diagram (PP)

1. All residential land use quantities for this alternative were provided by the County Planning Department, as shown in **Table 4.4-8**. All residential development in areas designated Residential Low Density was assumed to be single-family residences. Otherwise, the residences were assumed to be multi-family residential. Several exceptions were made in the case that a current application for the development identifies the amount of single-family or multi-family residential (as identified in Section 3.0 [Project Description]). In addition, East-West Partners has indicated that all future residential development within Northstar is planned to be multi-family. Therefore, the existing single-family dwelling units in Northstar were assumed to remain, but all other Northstar residential development was assumed to consist of multi-family residential.

TABLE 4.4-8
LAND USE QUANTITIES FOR THE PP: PROPOSED LAND USE DIAGRAM

Development Name	Residential Dwelling Units	Single Family Dwelling Units (SFDU)/Multi-Family Dwelling Units (MFDU)
Lahontan I & II	537	SFDU
Ponderosa Palisades/Sierra Meadows	449	SFDU
Northstar	3,700	SFDU/MFDU
Martis Ranch	1,360	SFDU/MFDU
Hopkins Ranch	87	SFDU
Siller Ranch	1,000	SFDU
Eaglewood	~~506~~464	SFDU/MFDU
Waddle Ranch	894	SFDU/MFDU
Waddle Road/SR 267	105	SFDU
Residential Forest East of Northstar	122~~1~~	SFDU
Northstar Drive Employee Housing	270	MFDU
East of SR 267 – Northstar	160	SFDU
Residential Forest near County Line	51	SFDU
Residential County Line Medium Density	80	MFDU
Total	**~~9,220~~9,169**	

2. For all commercial and office space, 20 percent of the acreage is subtracted for use by roadways and utilities. Of the remaining acreage, a maximum Floor-to-Area Ratio (FAR) of 0.25 percent is assumed. ~~The square footage of tourist commercial in the Siller Brothers Property was adjusted from 383,000 square feet to 75,000 square feet.~~The tourist commercial area in the Northstar Highlands project area was assumed to contain a 255-room hotel, as described in the current (May, 2003) Northstar Highlands project description.

A total of ~~9,220~~9,169 dwelling units (~~4,731~~5,289 single-family and ~~4,489~~3,880 multi-family dwelling units) and ~~1,190,000~~670,000 square feet of commercial/office land uses were used in the traffic analysis, in addition to the golf courses.

Existing Martis Valley General Plan Land Use Map (AA)

1. Because the Sierra Meadows/Ponderosa Palisades area has already been subdivided into 449 lots and Lahontan I and II has already been approved to develop 537 single-family dwelling units, adjustments were required to account for existing development in these areas. Therefore, because the Lahontan areas consist of 421 acres of land designated Residential Low Density, the 421 acres was subtracted from the total Residential Low Density land use acreage. Similarly, as the Sierra Meadows/Ponderosa Palisades area consists of 40 acres designated Residential Low Density and 350 acres designated Residential Medium Density, the total acreage was adjusted accordingly. The existing residential lots are added back in to the total in step 3.

2. For all residential areas, 20 percent of the acreage was first subtracted from the total acreage to reflect roadway and utility use. The maximum allowable density for each land use designation was then applied to the remaining acreage. For example, if a 40-acre area was designated Residential High Density at a density of 3-6 units per acre, the 40 acres would be multiplied by 0.8 and then by the maximum density (6 units per acre) to estimate a total of 192 units. The residential uses contained within the Forest, Residential Low Density, Open Space, and Residential Valley designations were assumed to consist of single-family residences only. The residential uses contained within the Residential High Density, Residential Medium Density, and Ski-Based Commercial Residential designations were assumed to consist of multi-family residences only. A list of the maximum allowable density of each land use designation contained in the existing Martis Valley General Plan is shown in **Table 4.4-9.**

TABLE 4.4-9
EXISTING COMMUNITY PLAN MAXIMUM ALLOWABLE LAND USE DENSITIES

Land Use Designation	Maximum Allowable Density
Forest	1 DU / 10 acre
High Density Residential	6 DU / acre
Medium Density Residential	3 DU / acre
Low Density Residential	1 DU / acre
Open Space	1 DU / acre
Ski-Based Commercial	15 DU / acre
Valley Residential	1 DU / 10 acres

Note 1: DU = Dwelling Unit
Note 2: 6 acres of High Density Residential was assumed to have a maximum allowable density of 15.2 dwelling units per acre to represent the recently-approved Northstar Employee Housing development.

3. Next, the 537 existing single-family residential lots in Lahontan and the 449 existing dwelling residential lots in the Sierra Meadows/Ponderosa Palisades neighborhood were added to the totals as single-family dwelling units. While the majority of the Northstar area is designated Residential Medium Density (indicating multi-family dwelling units), the existing single-family lots contained in Northstar were assumed to remain.

4. For all commercial and office space, 20 percent of the acreage is subtracted for use by roadways and utilities. Of the remaining acreage, a maximum FAR of 25 percent is assumed. In other words, the square feet of floor area of the commercial and office spaces were assumed to be 20 percent of the total land area (80 percent multiplied by 25 percent).

5. The Ski-Based Commercial land use designation was assumed to contain both residential and commercial within the same area. For example, 10 acres of land designated Ski-Based Commercial would contain 87,120 square feet of commercial land use (10 acres X 43,560 square feet/acre X 80 percent X 0.25 FAR), as well as 120 multi-family dwelling units (10 acres X 80 percent X 15 DU/acre). In addition, no residential use was assigned to the smaller 1 to 2 acre parcels located on the ski mountains.

A total of 11,668 dwelling units (4,064 single-family and 7,604 multi-family dwelling units), 1,681,000 square feet of commercial/office land uses, and 130 acres of Recreation land use were identified used for the traffic analysis, in addition to the golf courses.

Alternative 1 Land Use Map Alternative (AB)

1. The same adjustments as those presented above for the Existing Martis Valley General Plan Land Use Map were made for the Lahontan development and the Sierra Meadows/Ponderosa Palisades development for this. The only difference in methodology was that the Lahontan and Sierra Meadows/Ponderosa Palisades areas are wholly designated as Residential Low Density in Alternative 1. A similar adjustment was made for the Northstar area, which consisted of removing 1,174 acres of the Residential Low Density designation contained within Northstar.

2. As with the Existing Community Plan Alternative, 20 percent of the acreage was subtracted from the total acreage for roadway and utility use, and then the maximum allowable density for each land use designation was then applied to the remaining acreage. The residential uses within the Forest, Residential Low Density, Residential Rural, and Residential Forest designation areas were assumed to consist of single-family residences only. The residential contained within the Residential High Density, Residential Medium Density, and Ski-Based Commercial Residential designations were assumed to consist of multi-family residences only. A list of the maximum allowable density of each land use designation under Alternative 1 is shown in **Table 4.4-10.**

TABLE 4.4-10
ALTERNATIVE 1 MAXIMUM ALLOWABLE LAND USE DENSITIES

Land Use Designation	Maximum Allowable Density
Forest	1 DU / 40 acre
Residential High Density	15 DU / acre
Residential Medium Density	10 DU / acre
Residential Low Density	5 DU / acre
Residential Rural	1 DU / acre
Residential Forest	2.5 acres / 1 DU
Tourist Commercial	15 DU / acre

Note: DU = Dwelling Unit

3. Next, the 537 single-family dwelling units in Lahontan and the 449 single-family dwelling units in the Sierra Meadows/Ponderosa Palisades neighborhood were added to the totals as single-family dwelling units. In addition, 3,522 single-family dwelling units were added to the Northstar area, which reflects the application of a 3 dwelling unit per acre density to the 1,174 acres of Residential Low Density designation. The amount of single-family dwelling units that were included in each Northstar TAZ was based upon the proportion of Residential Low Density acreage that exists in each TAZ.

4. For all commercial and office space, 20 percent of the acreage is subtracted for use by roadways and utilities. Of the remaining acreage, a maximum FAR of 25 percent is assumed.

5. As with the Existing Martis Valley General Plan Land Use Map, the Tourist Commercial land use designation (similar to the Ski-Based Commercial land use designation) may have both residential and commercial associated to the acreage. In addition, no residential use was assigned to the smaller one to two acre parcels located on the ski mountains.

Using this methodology, a total of 10,511 dwelling units (8,558 single-family and 1,953 multi-family dwelling units) and 1,220,000 square feet of commercial/office land uses was used for the traffic analysis, in addition to the golf courses.

Alternative 2 Land Use Map Alternative (AC)

This land uses alternative is the same as the Proposed Land Use Alternative except that it does not contain any development on the Martis Ranch property, located on the east side of SR 267. A total of 7,956 dwelling units (3,467 single-family and 4,489 multi-family dwelling units) and 1,173,000 square feet of commercial/office land uses was used for the traffic analysis, in addition to the golf courses.

Estimation of Trip Rates

Per Placer County Department of Public Works direction, it was assumed that 20 percent of all residences in Martis Valley are full-time residences, and that the remaining 80 percent are second homes, with the exception of the residences that reside in the Ponderosa Palisades neighborhood. The assumption that 20 percent of the residences in Martis Valley will be full-time residences was based upon the review of the existing number of homes that are second homes in the Martis Valley area. As the proportion of homes used as full-time residences is actually presently lower than 20 percent and as the trip generation of full-time residences is higher than that of second homes, this assumption results in conservative (i.e., "high") estimates of total trip generation.

ITE land use code 260 (Recreational Homes) was used as the appropriate rate for second homes, while ITE land use code 210 (Single Family Dwelling Units) was used for full-time residences. A blended single-family and multi-family trip rate was estimated, as shown in **Table 4.4-11**. As the ITE *Trip Generation Manual* does not include a recreational multi-family dwelling unit rate, the assumption was made that multi-family recreational units have the same trip generation rate as a single-family recreational unit. (While MFDU typically have rates lower than SFDU, recreational MFDU probably have a higher utilization rate, as they are more likely in a rental pool program.)

TABLE 4.4-11
RESIDENTIAL TRIP RATES

	ITE Land Use Code	ADT	PM Peak-Hour Trip of Generator		
			In	Out	Total
Single-Family Dwelling Unit Rate Calculation					
Recreational Home	260	3.16	0.14	0.17	0.31
SFDU	210	9.57	0.65	0.37	1.02
Blended Rate Assuming 80 % Recreational		4.44	0.24	0.21	0.45
MFDU Rate Calculation					
Recreational Home	260	3.16	0.14	0.17	0.31
Condominium	230	5.86	0.35	0.19	0.54
Blended Rate Assuming 80 % Recreational		3.70	0.18	0.17	0.36

Source: ITE Trip Generation Manual, 6th Edition, 1997.

It was assumed that the residences contained within the Ponderosa Palisades neighborhood (TAZ 91), which is located west of SR 267 and accessible via Martis Valley Road and Palisades Drive, consist of 80 percent primary homes and 20 percent secondary homes. This assumption came out of the model calibration to existing conditions, which indicated that the residences in the Ponderosa Palisades neighborhood generate more traffic than residences in the remainder of Martis Valley. The trip rates for the Ponderosa Palisades neighborhood residences located within the TAZs contained within the Town of Truckee were also increased and the same trip rates were applied as to TAZ 91. These rates are shown in **Table 4.4-12**. **Table 4.4-13** provides a summary of all the trip rates that were used in the model.

TABLE 4.4-12
PONDEROSA PALISADES/SIERRA MEADOWS AREA RESIDENTIAL TRIP RATES

	ITE Land Use Code	ADT	PM Peak-Hour Trip of Generator		
			In	Out	Total
Single-Family Dwelling Unit Rate Calculation					
Recreational Home	260	3.16	0.14	0.17	0.31
Single-Family Dwelling Unit	210	9.57	0.65	0.37	1.02
Blended Rate Assuming 20 % Recreational		8.29	0.55	0.33	0.88
Multi-Family Dwelling Unit Rate Calculation					
Recreational Home	260	3.16	0.14	0.17	0.31
Condominium	230	5.86	0.35	0.19	0.54
Blended Rate Assuming 20 % Recreational		5.32	0.31	0.19	0.49

TABLE 4.4-13
P.M. PEAK-HOUR TRIP RATES

Land Use	Corresponding ITE Land Use Code	Corresponding ITE Land Use	Unit	Rate (PM peak-hour trips per unit)
Single-Family Dwelling Units	--	--	Dwelling Units	0.45
Multi-Family Dwelling Units	--	--	Dwelling Units	0.36
General Commercial	814	Specialty Retail Center	1,000 s.f. floor area	2.59
Public or Professional Office (Office)	710	General Office	1,000 s.f. floor area	1.49
General Commercial	814	Specialty Retail Center	1,000 s.f. floor area	2.59
Golf Course	430	Golf Course	Holes	3.56
Single-Family Dwelling Units In Ponderosa Palisades Neighborhood (1)	--	--	Dwelling Units	0.88
Multi-Family Dwelling Units	--	--	Dwelling Units	0.49
Recreational	412	County Park	Acres	0.06
Hotel	330	Resort Hotel	Rooms	0.49

Note 1: Residences in Ponderosa Palisades neighborhood are assumed to be 80 percent full-time residences and 20 percent second homes.

Source: ITE Trip Generation Manual, 6th Edition, 1997.

The trip generation rates identified above take into account incidental trips associated with each land use, including service trips, employee trips and commute trips by residents and employees.

A summary of the total number of trips generated by each alternative is summarized in **Appendix 4.4** and in **Table 4.4-14.**

Estimation of 2021 Traffic Volumes

In order to estimate 2021 traffic volumes, the full build-out of the Town of Truckee General Plan land uses was assumed as well as planned development in Nevada County and anticipated increases in traffic volumes that feed into the Martis Valley area. In addition, the land uses proposed by each Martis Valley land use alternative were also added to the model. Model runs were conducted to estimate future 2021summer volumes. Please note that the 2021 model network contains the Third Tahoe Donner Connection, which would connect SR 89 to Northwoods Boulevard and Bridge Street in Downtown Truckee. The model also contains Sawmill Flat Road and Highlands Drive in the Northstar area, both of which have been approved to be constructed as part of the Northstar Employee Housing development. Because the model is calibrated to provide estimates of summer P.M. peak-hour volumes only, the winter volumes were estimated by applying factors to

summer turning-movement volumes and then balancing the volumes along SR 267 and Brockway Road. This was accomplished in the following steps:

1. The amount of traffic generated by skiers at the Northstar-at-Tahoe Ski area was estimated based upon the data provided in the *Northstar-at-Tahoe 2000-2001 Winter Season Traffic Monitoring Program Report* (LSC, August, 2001). The skier traffic generated by skiers at the Northstar-At-Tahoe ski area was subtracted from the peak winter traffic volumes to estimate all non-skier winter traffic.

2. A ratio of summer to non-skier winter turning movement volumes was estimated at each of the study intersections.

3. The summer to winter ratio was applied to all summer 2021 turning-movement volumes to estimate peak winter non-skier traffic volumes. The volumes were balanced along the SR 267 corridor and Brockway Road.

4. The skier traffic was then added back to the winter non-skier volumes to estimate 2021 peak winter traffic volumes. The traffic generated by the Siller Ranch ski area access was also added to the winter volumes for all scenarios. The traffic generated by the Siller Ranch ski area access was estimated based upon the existing traffic levels generated by Northstar-At-Tahoe ski area. The ratio of acreage at the Northstar-At-Tahoe ski area to the proposed acreage of the Siller Ranch ski area access was applied to the traffic generated by the Northstar-At-Tahoe ski area to estimate the Siller Brothers ski area access trip generation. The 30th highest winter hour was estimated by adding the 30th highest hour skier traffic volumes onto the winter non-skier traffic volumes.

ADT volumes were estimated for 2021 forecast conditions. It is only necessary to consider summer ADT values, as the comparison between future 2021 summer and winter ADT levels indicates that summer ADT represents a "worst case" condition for traffic over an entire day. An analysis of future daily traffic volumes along Northstar Drive was conducted to validate this point. The data contained in the Northstar-at-Tahoe 2000-2001 Winter Season Traffic Monitoring Program Report was used to estimate the non-skier ADT on Northstar Drive during the day of the 30th highest winter peak hour traffic volume. Based upon the observed traffic volumes and the recorded number of skiers that bought tickets at Northstar-At-Tahoe that day, it is estimated that approximately 45 percent of the traffic on Northstar Drive during a winter day is generated by skiers. Next, it was determined based on existing counts that the winter non-skier ADT on Northstar Drive is approximately 70 percent of the summer ADT. Therefore, the winter ADT on Northstar Drive can be assumed to be equal to 70 percent of the summer ADT plus the skier traffic. Applying these results to the future 2021 traffic volumes indicates that the winter ADT remains less than the summer ADT in the future. ADT volumes were estimated based upon the peak-hour forecasts discussed above, multiplied by the factors presented in Section 4.1.1.

A more detailed description of the 2021 traffic volume estimation may be found in **Appendix 4.4.**

TABLE 4.4-14
ESTIMATED TRIP GENERATION FOR EACH LAND USE MAP ALTERNATIVE

	Quantity	Unit	Weekday P.M. Peak-Hour Trip Rate (3)	Daily Trip Rate (3)	Weekday P.M. Peak-Hour Trips	Daily Trips
Existing Martis Valley General Plan Land Use Map (AA)						
Single-Family Dwelling Units	3,503	DU(1)	0.45	4.44	1,627	15,553
Multi-Family Dwelling Units	7,604	DU	0.36	3.7	2,737	28,135
General Commercial	227	KSF(2)	2.59	40.67	588	9,232
Office	723	KSF	1.49	11.01	1,077	7,960
Tourist Commercial	732	KSF	2.59	40.67	1,896	29,770
Golf Course (4)	41	Holes	3.56	35.74	146	1,465
Single-Family Dwelling Units in Palisades Neighborhood	449	DU	0.88	8.29	395	3,722
Recreational	130	Acres	0.06	2.28	8	296
Total	--	--	--	--	*8,474*	*96,631*
Proposed Land Use Diagram						
Single-Family Dwelling Units	~~4,282~~4,840	DU	0.45	4.44	~~1,927~~2,178	~~19,012~~21,490
Multi-Family Dwelling Units	~~4,489~~3,880	DU	0.36	3.7	~~1,616~~1,397	~~16,609~~14,356
General Commercial	~~270~~330	KSF	2.59	40.67	~~699~~855	~~10,981~~13,421
Office	~~357~~70	KSF	1.49	11.01	~~532~~104	~~3,931~~771
Tourist Commercial	~~563~~270	KSF	2.59	40.67	~~1,458~~699	~~22,897~~10,981
Golf Course	~~41~~40	Holes	3.56	35.74	~~146~~126	1,430~~1,465~~
Single-Family Dwelling Units in Palisades Neighborhood	449	DU	0.88	8.29	395	3,722
Recreational	0	Acres	0.06	2.28	0	0
Hotel	255	Rooms	.49	5.35	125	1,364
Total	--	--	--	--	*~~6,773~~5,879*	*~~78,617~~67,535*
Percent of Existing General Plan	--	--	--	--	*~~79.9~~69.9%*	*~~81.8~~70.3%*
Alternative 1 Land Use Map (AB)						
Single-Family Dwelling Units	8,109	DU	0.45	4.44	3,649	36,004
Multi-Family Dwelling Units	1,953	DU	0.36	3.7	703	7,226
General Commercial	192	KSF	2.59	40.67	497	7,809
Office	314	KSF	1.49	11.01	468	3,457
Tourist Commercial	714	KSF	2.59	40.67	1,849	29,038
Golf Course	41	Holes	3.56	35.74	146	1,465
Single-Family Dwelling Units in Palisades Neighborhood	449	DU	0.88	8.29	395	3,722
Recreational	0	Acres	0.06	2.28	0	0
Total	--	--	--	--	*7,707*	*88,721*
Percent of Existing Community Plan	--	--	--	--	*90.9%*	*92.3%*
Alternative 2 Land Use Map (AC)						
Single-Family Dwelling Units	3,018	DU	0.45	4.44	1,358	13,400
Multi-Family Dwelling Units	4,489	DU	0.36	3.7	1,616	16,609
General Commercial	253	KSF	2.59	40.67	655	10,290
Office	357	KSF	1.49	11.01	532	3,931
Tourist Commercial	563	KSF	2.59	40.67	1,458	22,897
Golf Course	41	Holes	3.56	35.74	146	1,465
Single-Family Dwelling Units in Palisades Neighborhood	449	DU	0.88	8.29	395	3,722
Recreational	0	Acres	0.06	2.28	0	0
Total	--	--	--	--	*6,160*	*72,314*
Percent of Existing Community Plan	--	--	--	--	*72.7%*	*75.2%*

Note 1: DU = dwelling units.
Note 2: KSF=1,000 square feet of floor area.
Note 3: Trip Rates based upon the ITE Trip Generation Manual (TRB, 1997).
Note 4: Adjusted to reflect private versus public golf facilities.

Conceptual Future Development Plans for Northstar Area

While no formal application has been presented to the County, East West Partners has indicated that the current conceptual plan for the area is to relocate Sawmill Flat Road from its current location (near the southern leg of the Northstar Drive/Basque Road intersection) eastward approximately 1,000 feet to a location near the existing gas station, where a roundabout would be built. The north (fourth) leg of the Northstar Drive/Sawmill Flat Road intersection would provide access to approximately 1,800 day skier intercept parking spaces, which would be relocated from its current location north of the Village. The relocation of these parking spaces would substantially reduce winter peak-hour traffic volumes along Northstar Drive west of the skier intercept parking lot. As the project has yet to be officially proposed and to remain conservative in this analysis, the relocation of these spaces was not assumed for the base case 2021 traffic conditions.

It was estimated based upon the historical operation of ski resorts in the Sierra that 40 percent of day skiers exit the ski resort during the PM peak hour. This percentage was applied to the potential 1,240 relocated parking spaces to estimate the total number of vehicles that would exit during the PM peak hour would be relocated. Based upon this analysis, it was estimated that moving 1,240 skier parking spaces could relocate approximately 496 PM peak-hour exiting trips. However, assuming a capacity of 30 people on the shuttle buses used to transport skiers and a 2.46 vehicle occupancy rate, per the *Northstar-At-Tahoe 2000-2001 Winter Season Traffic Monitoring Program Report,* 40 1-way bus trips would also be generated during the PM peak hour. Therefore the relocation of the skier parking would increase westbound traffic PM peak hour traffic on Northstar Drive by 40 trips and decrease the eastbound PM peak hour traffic by 456 trips.

Analysis of Roadway Improvement Options/Scenarios

Intersection LOS was calculated for 2 future roadway scenarios, as depicted in **Figure 4.4-4,** both of which contain the SR 267 Bypass (with 1 travel lane in each direction), a traffic signal at the SR 267/Airport Road/Schaffer Mill Road and Bridge Street/Donner Pass Road intersections, as well as some additional intersection turn lanes that are already programmed for construction. Both roadway networks also assume a full-access roadway connection between Big Springs Drive and Sawmill Flat Road, creating a loop through the Northstar mid-mountain area south of Northstar Drive. The 2 scenarios analyzed were as follows:

> Proposed Roadway Network (No Schaffer Mill Road Connections) -- This roadway improvement option is currently proposed as part of the Martis Valley Community Plan Update and includes the widening of SR 267 to two lanes in each direction, from a point just south of Northstar Drive to Interstate 80 via the SR 267 Bypass.
>
> All Connections Option (All Connections) -- This roadway improvement option contains a 4-lane SR 267, a Northstar Connector, and a Palisades Connector. The Northstar Connector would provide a connection from Schaffer Mill Road southward to the Northstar area. The exact alignment of this roadway has also not been determined, although the link lengths used in the model represent the most reasonable alignment connecting Big Springs Drive to Shaffer Mill Road just west of the Lahontan parcel. This roadway was entered into the Town of Truckee Model with an operating speed of 25 miles per hour. The Palisades Connector would provide between 1 and 3 connection(s) from Schaffer Mill Road to

Insert Figure 4.4-4, black and white 8.5x11

the Ponderosa Palisades/Sierra Meadows neighborhood to the north. While there are 3 existing roadways that have been "stubbed out" to potentially provide this connection, the exact alignment of this connection (or connections) has not been determined. The amount of traffic that might divert onto this connector would vary slightly based upon the alignment chosen. However, because this is a planning level document and the Town of Truckee Model is a macro model, the most reasonable location of the roadway was chosen and entered into the Town of Truckee Model, with an operating speed of 25 miles per hour, comparable to other roadways contained within the model with similar characteristics.

Please note that traffic volumes were also generated for a roadway alternative, which contains a 4-lane SR 267 and a Northstar Connector, as well as a two-lane SR 267. While the intersection LOS was not analyzed for these roadway alternatives, the turning-movement volumes resulting on these roadway alternatives are shown in the Appendices.

Please note that the Proposed Land Use Diagram traffic analysis has been updated more recently than the analyses of the other traffic land use alternatives. The following assumptions were made for the revised Proposed Land Use Diagram traffic analysis that differ from the other three land use analyses:

1. The roadway network was revised to allow eastbound left turns (from I-80 eastbound– ~~off-ramp~~off-ramp to Donner Pass Road northbound) at the Donner Pass Road / I-80 eastbound intersection, as the intersection currently operates under this configuration. This configuration was not assumed under previous analyses (Existing Community Plan, Alternative 1, and Alternative 2) because Caltran's original plan was to prohibit left turns at this intersection after the completion of the SR 267 Bypass. Caltrans did not change the plan to allow left turns until after the completion of the original traffic analysis.

2. The land uses assumed for the Joerger Ranch (PC-3) Town of Truckee property were reviewed and compared to the most recent proposal for the Joerger Ranch development. It was determined that the Town of Truckee traffic model was underestimating the Joerger Ranch development by approximately half. Therefore, the land uses contained in the TAZ were updated to better reflect the proposed plan, per the direction of both Placer County and Town of Truckee staff. Please note that although the proposed Joerger Ranch development is consistent with the Town of Truckee General Plan, its proposed land uses were not consistent with the assumptions contained in the Town of Truckee traffic model.

3. The access to Martis Ranch or the Sierra Pacific Industries development from SR 267 was assumed to be provided via a~~the~~ fourth (eastern) leg of the SR 267 / Highland Drive intersection, which will also provide secondary access to the Highlands development and primary access to the Sawmill Height Employee Housing development. In previous analyses it was assumed to be located south of Highland Drive.

4. The location of residential land uses with Northstar were updated based upon the most recent plan for Northstar ~~the~~ Village per the most recent Northstar Highlands application. Previously, the location of remaining dwelling units was based upon the acreage of developable area in each TAZ.

PROJECT IMPACTS AND MITIGATION MEASURES

Impact 4.4.1 Potential to Exceed an Established Level of Service Standard

PP Depending upon the roadway network and analysis period, intersection and roadway Level of Service (LOS) standards are forecast to be exceeded under full development of the Proposed Land Use Diagram for roadways and ~~up to 8~~ intersections in the Town of Truckee~~,~~ and ~~3 intersections and roadway segments~~ in Placer County. Exceedence of LOS standards in the Town of Truckee or Placer County would be considered a **significant** impact.

AA Depending upon the roadway network and analysis period, intersection and roadway Level of Service (LOS) standards are forecast to be exceeded under full development of this land use alternative for roadways and ~~up to 8~~ intersections in the Town of Truckee, and ~~3 intersections and 1 roadway segment~~ in Placer County. Exceedence of LOS standards in the Town of Truckee or Placer County would be considered a **significant** impact.

AB Depending upon the roadway network and analysis period, intersection and roadway Level of Service (LOS) standards are forecast to be exceeded under full development of this land use alternative for roadways and ~~up to 8~~ intersections in the Town of Truckee, and ~~3 intersections and 2 roadway segments~~ in Placer County. Exceedence of LOS standards in the Town of Truckee or Placer County would be considered a **significant** impact.

AC Depending upon the roadway network and analysis period, intersection and roadway Level of Service (LOS) standards are forecast to be exceeded under full development of this land use alternative for roadways and ~~up to 8~~ intersections in the Town of Truckee, and ~~3 intersections and 2 roadway segments~~ in Placer County. Exceedence of LOS standards in the Town of Truckee or Placer County would be considered a **significant** impact.

PP ***Proposed Land Use Diagram***

Each intersection was analyzed using the Traffix Software package (Dowling Associates, 2000). Using the Traffix traffic analysis software package, the improvements required to obtain an adequate LOS at each intersection were determined. Within the Town of Truckee, the LOS standard only applies to the summer peak weekday PM peak hour. However, within Placer County the LOS standards apply to both the summer and winter peak periods analyzed. Two scenarios were analyzed for the Proposed Land Use Diagram. The traffic volumes that would result on the 2 roadway networks ("No Schaffer Mill Road Connections" and "All Connections") were analyzed.

As shown in **Table 4.4-15**, intersection LOS standards are forecast to be exceeded under the Proposed Land Use Diagram for the following intersections in the Town of Truckee under each roadway improvement option:

- SR 89/SR 267 Bypass/I-80 Westbound;
- SR 89/SR 267 Byypass/I-80 Eastbound;
- ~~SR 89/SR 267 Bypass/I-80 Eastbound;~~Donner Pass Road/I-80 Easttbound Off Ramp
- Glenshire Drive/Donner Pass Road (Existing SR 267);
- Bridge Street/Donner Pass Road;
- Bridge Street/West River Street;
- Brockway Road/Martis Valley Road;
- SR 267 Bypass/SR 267/Brockway Road (Existing SR 267)/Joerger Drive; and
- SR 89 South/Donner Pass Road.

Intersection LOS standards are forecast to be exceeded under the Proposed Land Use Diagram for the following intersections within Placer County are:

- SR 267/Airport Road/Schaffer Mill Road;
- SR 267/Northstar Drive; and
- SR 267/SR 28.

Please note that because this option allows left turns at the Donner Pass Road / I-80 Eastbound intersection, the intersection operates at a poor LOS compared to the other land use alternatives that assumed left turns are prohibited. The model indicates that if left turns are allowed virtually all drivers traveling from I-80 eastbound to SR 89 to the north would exit I-80 at this intersection. However, it is more likely that less traffic will exit I-80 to SR 89 north via this exit in the future in the absence of a signal than the model assigned, in order to avoid delays. In other words, if the delays at this intersection are greater than the delays at the signalized SR 267 / I-80 eastbound intersection, traffic will shift and exit I-80 at the SR 267 / I-80 eastbound intersection, thereby improving LOS at the Donner Pass Road / I-80 Eastbound intersection from that indicated.

TABLE 4.4-15
2021 INTERSECTION LOS UNDER PP: PROPOSED LAND USE DIAGRAM

Bold text indicates that LOS threshold exceeded.		Roadway Network:	All Connections		No Schaffer Mill Road Connections	
		Land Use:	Proposed		Proposed	
Intersection	Type of Control	Design Period:	Summer Weekday LOS	Winter Weekend LOS	Summer Weekday LOS	Winter Weekend LOS
SR 89/SR 267 Bypass/I-80 Westbound	Traffic Signal	Total Int.	**F**	~~E~~D	**F**	~~E~~D
SR 89/SR 267 Bypass/I-80 Eastbound	Traffic Signal	Total Int.	**F**	B	**F**	~~C~~B
DPR(Existing 267/89)/I-80 Westbound	Stop-Controlled	Worst Mvmnt.	B	B	B	B
		Total Int.	A	A	A	A
DPR(Existing 267/89)/I-80 Eastbound	Stop-Controlled	Worst Mvmnt.	~~C~~F	~~B~~F	~~C~~F	~~B~~F
		Total Int.	~~A~~F	~~A~~D	~~A~~F	~~A~~D
Glenshire Drive/DPR(Existing SR 267)	Stop-Controlled	Worst Mvmnt.	**F**	**F**	**F**	**F**
		Total Int.	**F**	**F**	**F**	**F**
Bridge Street/Donner Pass Road	Traffic Signal	Total Int.	**F**	**F**	**F**	**F**
Bridge Street/West River Street	Stop-Controlled	Worst Mvmnt.	**F**	**F**	**F**	**F**
		Total Int.	**F**	**F**	**F**	**F**
Brockway Rd/Palisades Dr	Traffic Signal	Total Int.	~~C~~B	~~C~~B	~~C~~B	B
Brockway Rd/Martis Valley Rd	Stop-Controlled	Worst Mvmnt.	**F**	**F**	**F**	**F**
		Total Int.	**F**	**F**	**F**	**F**
267Bypass/267/Brockway Rd/Joerger Dr	Traffic Signal	Total Int.	**F**	**F**	**F**	**F**
SR 267/Airport Road/Schaffer Mill Road	Traffic Signal	Total Int.	**F**	**F**	**F**	**F**
SR 267/Northstar Drive	Stop-Controlled (1)	Worst Mvmnt.	**F**	TC	**F**	TC
		Total Int.	**F**	**F**	**F**	**F**
SR 267/SR 28	Traffic Signal	Total Int.	E	**F**	~~F~~E	**F**
SR 89 South/Donner Pass Road	Traffic Signal	Total Int.	**E**	D	**E**	D

1 Traffic control program operates at SR 267/Northstar Drive during peak ski season, indicated by "TC."

In addition, as shown in the tables found in **Appendix 4.4** and **Table 4.4-16**, roadway LOS standards are forecast to be exceeded along the following roadways under "No Schaffer Mill Road Connections" and "All Connections":

- ~~Schaffer Mill Road, from SR 267 to the Hopkins Ranch access, unless the Northstar Drive Connector is built which would extend the section on which the LOS threshold is exceeded to the Eaglewood access.~~

- Northstar Drive, from SR 267 to Basque Drive, unless the Northstar Drive Connection is built.

Please note that the need to widen SR 267 to 4 lanes between Northstar Drive and Schaffer Mill Road/Airport Road would be avoided if the Northstar Connector were built (with or without the Palisades Connector). In addition, the portion of SR 267 from I-80 to Brockway Road would not need to be widened to 4 lanes to maintain an adequate LOS (LOS D or better) under any of the roadway network alternatives. Finally, under the Proposed Land Use Diagram, SR 267

would only need to be widened from Schaffer Mill Road to the Waddle Ranch Access, currently proposed to be located one mile north of the SR 267 / Northstar Drive intersection.

Also note that the construction of the Palisades Connector in the absence of the Northstar Connector would not reduce traffic volumes on SR 267 between Airport Road/Schaffer Mill Road and Brockway Road sufficient to avoid the need to provide four travel lanes as mitigation to the LOS F along this roadway segment. ~~In addition, while the provision of a Palisades Connector does reduce traffic volumes along Schaffer Mill Road, it does not reduce traffic volumes sufficient to avoid the need to provide four lanes along Schaffer Mill Road as mitigation to the LOS F condition along this roadway segment.~~ The provision of the Northstar Connector avoids the need to provide four lanes along Northstar Drive.

Exceedence of LOS standards in the Town of Truckee or Placer County would be considered a significant impact.

TABLE 4.4-16
UNMITIGATED ROADWAY LOS

Bold text indicates LOS threshold is exceeded	Unmitigated Roadway Level Of Service		
	Existing Roadway Network	**Proposed Roadway Option: 4-Lane SR 267 With No Schaffer Mill Road Connections**	**4-Lane SR 267 plus All Connectors Option**
Proposed Land Use Diagram (PP)			
SR 267 Bypass I-80 to Old Brockway Road	C (2)	A (2)	A (2)
SR 267 Old Brockway Road to Schaffer Mill Road	**F**	E	E
SR 267 Schaffer Mill Road to Northstar Drive	**F**	~~D~~D	D (2)
Schaffer Mill Road West of SR 267	~~E~~C (2)	~~E~~C (2)	~~F~~D (2)
Northstar Drive West of SR 267	**E**	**E**	C (2)
Existing Martis Valley General Plan Land Use Map (AA)			
SR 267 Bypass I-80 to Old Brockway Road	**F**	B	B
SR 267 Old Brockway Road to Schaffer Mill Road	**F**	E	E
SR 267 Schaffer Mill Road to Northstar Drive	**F**	D	D
Schaffer Mill Road West of SR 267	**F**	**F**	**F**
Northstar Drive West of SR 267	D	D	C (2)
Alternative 1 Land Use Map (AB)			
SR 267 Bypass I-80 to Old Brockway Road	D (2)	A (2)	A (2)
SR 267 Old Brockway Road to Schaffer Mill Road	**F**	E	E
SR 267 Schaffer Mill Road to Northstar Drive	**F**	D	D (2)
Schaffer Mill Road West of SR 267	**F**	**F**	**F**
Northstar Drive West of SR 267	**E**	**E**	C (2)
Alternative 2 Land Use Map (AC)			
SR 267 Bypass I-80 to Old Brockway Road	C (2)	A (2)	A (2)
SR 267 Old Brockway Road to Schaffer Mill Road	**F**	E	E
SR 267 Schaffer Mill Road to Northstar Drive	**F**	D	D (2)
Schaffer Mill Road West of SR 267	**E**	**E**	**F**
Northstar Drive West of SR 267	**E**	**E**	C (2)

Note 1: Roadway LOS standard is D in the Town of Truckee, LOS E along SR 267 in Placer County, and LOS D on all other arterial roadways in Placer County.
Note 2: Four lanes not required to attain LOS standard.
General Note: The 4-lane SR is the Community Plan proposed Circulation Diagram. The roadway network that does not contain the widening of SR 267 to four lanes was analyzed simply to depict whether the widening is required to maintain adequate LOS or not.

AA Existing Martis Valley General Plan Land Use Alternative

As shown in **Table 4.4-17**, the intersection LOS standards forecast to be exceeded under this land use alternative are the same as those forecasted under the Proposed Land Use Diagram (PP).

TABLE 4.4-17
2021 INTERSECTION LOS UNDER AA: EXISTING MARTIS VALLEY GENERAL PLAN LAND USE MAP

Bold text indicates that LOS threshold exceeded.		Roadway Network:	All Connections		No Schaffer Mill Road Connections	
		Land Use:	Existing Community Plan		Existing Community Plan	
		Design Period:	Summer Weekday LOS	Winter Weekend LOS	Summer Weekday LOS	Winter Weekend LOS
Intersection	**Type of Control**					
SR 89/SR 267 Bypass/I-80 Westbound	Traffic Signal	Total Int.	**F**	**F**	**F**	**F**
SR 89/SR 267 Bypass/I-80 Eastbound	Traffic Signal	Total Int.	**F**	C	**F**	C
DPR(Existing 267/89)/I-80 Westbound	Stop-Controlled	Worst Mvmnt.	B	B	B	B
		Total Int.	A	A	A	A
DPR(Existing 267/89)/I-80 Eastbound	Stop-Controlled	Worst Mvmnt.	C	B	C	B
		Total Int.	A	A	A	A
Glenshire Drive/DPR(Existing SR 267)	Stop-Controlled	Worst Mvmnt.	**F**	**F**	**F**	**F**
		Total Int.	**F**	**F**	**F**	**F**
Bridge Street/Donner Pass Road	Traffic Signal	Total Int.	**F**	**F**	**F**	**F**
Bridge Street/West River Street	Stop-Controlled	Worst Mvmnt.	**F**	**F**	**F**	**F**
		Total Int.	**F**	**F**	**F**	**F**
Brockway Rd/Palisades Dr	Traffic Signal	Total Int.	C	C	C	C
Brockway Rd/Martis Valley Rd	Stop-Controlled	Worst Mvmnt.	**F**	**F**	**F**	**F**
		Total Int.	**F**	**F**	**F**	**F**
267Bypass/267/Brockway Rd/Joerger Dr	Traffic Signal	Total Int.	**F**	**F**	**F**	**F**
SR 267/Airport Road/Schaffer Mill Road	Traffic Signal	Total Int.	**F**	**F**	**F**	**F**
SR 267/Northstar Drive	Stop-Controlled (1)	Worst Mvmnt.	**F**	TC	**F**	TC
		Total Int.	**F**	**F**	**F**	**F**
SR 267/SR 28	Traffic Signal	Total Int.	**F**	**F**	**F**	**F**
SR 89 South/Donner Pass Road	Traffic Signal	Total Int.	**E**	D	**E**	D

1 Traffic control program operates at SR 267/Northstar Drive during peak ski season, indicated by "TC."

In addition, as shown in the tables found in **Appendix 4.4** and **Table 4.4-16**, roadway LOS standards are forecast to be exceeded along the following roadway:

- Schaffer Mill Road, from SR 267 to the Lahontan Property access for all roadway alternatives.

Please note that because the analysis of this option does not assume left turns at the Donner Pass Road / I-80 Eastbound intersection, the intersection operates at good LOS. The construction of the Palisades Connector in the absence of the Northstar Connector would not reduce traffic volumes on SR 267 between Airport

Road/Schaffer Mill Road and Brockway Road sufficient to avoid the need to provide 4 travel lanes as mitigation to the LOS F along this roadway segment. In addition, while the provision of a Palisades Connector does reduce traffic volumes along Schaffer Mill Road, it does not reduce traffic volumes sufficient to avoid the need to provide 4 lanes along Schaffer Mill Road as mitigation to the LOS F condition along this roadway segment. In addition, the portion of SR 267 from I-80 to Brockway Road would not need to be widened to 4 lanes to maintain an adequate LOS (LOS D or better) under any of the roadway network alternatives, except the Existing Martis Valley General Plan Alternative (AA). Under this alternative 4 lanes from I-80 to Brockway Road would be required to maintain an adequate LOS.

Exceedence of LOS standards in the Town of Truckee or Placer County would be considered a significant impact.

AB Alternative 1 Land Use Map

As shown in **Table 4.4-18**, the intersection LOS standards forecast to be exceeded under this land use alternative are the same as under the Proposed Land Use Diagram (PP).

TABLE 4.4-18
2021 INTERSECTION LOS UNDER AB: ALTERNATIVE 1 LAND USE MAP

Bold text indicates that LOS threshold exceeded.		Roadway Network:	All Connections		No Schaffer Mill Road Connections	
		Land Use:	Alternative 1		Alternative 1	
		Design Period:	Summer Weekday	Winter Weekend	Summer Weekday	Winter Weekend
Intersection	Type of Control		LOS	LOS	LOS	LOS
SR 89/SR 267 Bypass/I-80 Westbound	Traffic Signal	Total Int.	**F**	**F**	**F**	**F**
SR 89/SR 267 Bypass/I-80 Eastbound	Traffic Signal	Total Int.	**F**	C	**F**	C
DPR(Existing 267/89)/I-80 Westbound	Stop-Controlled	Worst Mvmnt.	B	B	B	B
		Total Int.	A	A	A	A
DPR(Existing 267/89)/I-80 Eastbound	Stop-Controlled	Worst Mvmnt.	C	B	C	B
		Total Int.	A	A	A	A
Glenshire Drive/DPR(Existing SR 267)	Stop-Controlled	Worst Mvmnt.	**F**	**F**	**F**	**F**
		Total Int.	**F**	**F**	**F**	**F**
Bridge Street/Donner Pass Road	Traffic Signal	Total Int.	**F**	**F**	**F**	**F**
Bridge Street/West River Street	Stop-Controlled	Worst Mvmnt.	**F**	**F**	**F**	**F**
		Total Int.	**F**	**F**	**F**	**F**
Brockway Rd/Palisades Dr	Traffic Signal	Total Int.	C	C	C	C
Brockway Rd/Martis Valley Rd	Stop-Controlled	Worst Mvmnt.	**F**	**F**	**F**	**F**
		Total Int.	**F**	**F**	**F**	**F**
267Bypass/267/Brockway Rd/Joerger Dr	Traffic Signal	Total Int.	**F**	**F**	**F**	**F**
SR 267/Airport Road/Schaffer Mill Road	Traffic Signal	Total Int.	**F**	**F**	**F**	**F**
SR 267/Northstar Drive	Stop-Controlled (1)	Worst Mvmnt.	**F**	TC	**F**	TC
		Total Int.	**F**	**F**	**F**	**F**
SR 267/SR 28	Traffic Signal	Total Int.	E	**F**	E	**F**
SR 89 South/Donner Pass Road	Traffic Signal	Total Int.	**E**	D	**E**	D

1 Traffic control program operates at SR 267/Northstar Drive during peak ski season, indicated by "TC."

Please note that because the analysis of this option does not assume left turns at the Donner Pass Road / I-80 Eastbound intersection, the intersection operates at good LOS.

In addition, as shown in the tables found in **Appendix 4.4** and **Table 4.4-16**, roadway LOS standards are forecast to be exceeded along the following roadways:

- Schaffer Mill Road from SR 267 to the Lahontan Property access for all roadway alternatives; and
- Northstar Drive between SR 267 and Basque Drive unless the Northstar Drive Connector is built.

Please note that the need to widen SR 267 to 4 lanes between Northstar Drive and Schaffer Mill Road/Airport Road would be avoided if the Northstar Connector were built (with or without the Palisades Connector). In addition, the portion of SR 267 from I-80 to Brockway Road would not need to be widened to 4 lanes to maintain an adequate LOS (LOS D or better) under any of the roadway network alternatives.

Also note that the construction of the Palisades Connector in the absence of the Northstar Connector would not reduce traffic volumes on SR 267 between Airport Road/Schaffer Mill Road and Brockway Road sufficient to avoid the need to provide 4 travel lanes as mitigation to the LOS F along this roadway segment. In addition, while the provision of a Palisades Connector does reduce traffic volumes along Schaffer Mill Road, it does not reduce traffic volumes sufficient to avoid the need to provide 4 lanes along Schaffer Mill Road as mitigation to the LOS F condition along this roadway segment.

Exceedence of LOS standards in the Town of Truckee or Placer County would be considered a significant impact.

AC Alternative 2 Land Use Map

As shown in **Table 4.4-19**, intersection LOS standards could potentially be exceeded under this land use alternative for the same intersections as with the Proposed Land Use Diagram (PP).

TABLE 4.4-19
2021 INTERSECTION LOS UNDER AC: LAND USE ALTERNATIVE 2

Bold text indicates that LOS threshold exceeded.		Roadway Network:	All Connections		No Schaffer Mill Road Connections	
		Land Use:	Alternative 2		Alternative 2	
		Design Period:	Summer Weekday LOS	Winter Weekend LOS	Summer Weekday LOS	Winter Weekend LOS
Intersection	**Type of Control**					
SR 89/SR 267 Bypass/I-80 Westbound	Traffic Signal	Total Int.	**F**	**E**	**F**	**E**
SR 89/SR 267 Bypass/I-80 Eastbound	Traffic Signal	Total Int.	**F**	C	**F**	C
DPR(Existing 267/89)/I-80 Westbound	Stop-Controlled	Worst Mvmnt.	B	B	B	B
		Total Int.	A	A	A	A
DPR(Existing 267/89)/I-80 Eastbound	Stop-Controlled	Worst Mvmnt.	C	B	C	B
		Total Int.	A	A	A	A
Glenshire Drive/DPR(Existing SR 267)	Stop-Controlled	Worst Mvmnt.	**F**	**F**	**F**	**F**
		Total Int.	**F**	**F**	**F**	**F**
Bridge Street/Donner Pass Road	Traffic Signal	Total Int.	**F**	**F**	**F**	**F**
Bridge Street/West River Street	Stop-Controlled	Worst Mvmnt.	**F**	**F**	**F**	**F**
		Total Int.	**F**	**F**	**F**	**F**
Brockway Rd/Palisades Dr	Traffic Signal	Total Int.	C	C	C	B
Brockway Rd/Martis Valley Rd	Stop-Controlled	Worst Mvmnt.	**F**	**F**	**F**	**F**
		Total Int.	**F**	**F**	**F**	**F**
267Bypass/267/Brockway Rd/Joerger Dr	Traffic Signal	Total Int.	**F**	**F**	**F**	**F**
SR 267/Airport Road/Schaffer Mill Road	Traffic Signal	Total Int.	**F**	**F**	**F**	**F**
SR 267/Northstar Drive	Stop-Controlled (1)	Worst Mvmnt.	**F**	TC	**F**	TC
		Total Int.	**F**	**E**	**F**	**F**
SR 267/SR 28	Traffic Signal	Total Int.	D	**F**	D	**F**
SR 89 South/Donner Pass Road	Traffic Signal	Total Int.	**E**	D	**E**	D

1 Traffic control program operates at SR 267/Northstar Drive during peak ski season, indicated by "TC."

Please note that because the analysis of this option does not assumes left turns at the Donner Pass Road / I-80 Eastbound intersection, the intersection operates at good LOS.

In addition, as shown in the tables found in **Appendix 4.4** and **Table 4.4-16**, roadway LOS standards are forecast to be exceeded along the following roadways:

- Schaffer Mill Road, from SR 267 to the Hopkins Ranch Property access unless the Northstar Connector Roadway is built, in which case it will need to be widened from SR 267 to the Eaglewood access;
- Northstar Drive between SR 267 and Basque Drive, unless the Northstar Drive Connector is built.

Please note that the need to widen SR 267 to 4 lanes between Northstar Drive and Schaffer Mill Road/Airport Road would be avoided if the Northstar Connector were built (with or without the Palisades Connector). In addition, the portion of SR 267 from I-80 to Brockway Road would not need to be widened to 4 lanes to maintain an adequate LOS (LOS D or better) under any of the roadway network alternatives.

The construction of the Palisades Connector in the absence of the Northstar Connector would not reduce traffic volumes on SR 267 between Airport Road/Schaffer Mill Road and Brockway Road sufficient to avoid the need to provide four travel lanes as mitigation to the LOS F along this roadway segment. In addition, while the provision of a Palisades Connector does reduce traffic volumes along Schaffer Mill Road, it does not reduce traffic volumes sufficient to avoid the need to provide four lanes along Schaffer Mill Road as mitigation to the LOS F condition along this roadway segment.

Exceedence of LOS standards in the Town of Truckee or Placer County would be considered a significant impact.

Policies and Implementation Programs

New developmental projects in the Plan area would be required to adhere with policies and implementation programs of the Martis Valley Community Plan listed below. Compliance with these plan policies and implementation programs would provide some mitigation to traffic impacts.

Streets and Highways

Goal 5.A: To provide for the long-range planning and development of the county's roadway system to ensure the safe and efficient movement of people and goods.

Policy 5.A.1 *The County shall plan, design, and regulate roadways in accordance with the classification system established as a part of this plan.*

Policy *5.A.2* *The County shall require that streets and roads be dedicated, widened, and constructed according to the roadway design and access standards generally defined in the Placer County General Plan and the County's Highway Deficiency Report. Exceptions to these standards may not be necessary but should be kept to a minimum and shall be permitted only upon determination by the Public Works Director that safe and adequate public access and circulation are preserved by such exceptions.*

Policy 5.A.3 *The County shall require that roadway rights-of way be wide enough to accommodate the travel lanes needed to carry long-range forecasted traffic volumes (beyond 2021), as well as any planned bikeways and required drainage, utilities, landscaping, and suitable separations.*

Policy 5.A.4 *On arterial roadways and thoroughfares, intersection spacing should be maximized. Driveway encroachments along collector and arterial roadways, and to a lesser degree, collector roadways, shall be minimized.*

Access control restrictions for each class of roadway in the county are specified in Part I of the Placer County General Plan Document.

Policy 5.A.5 *The County shall require that through-traffic be accommodated in a manner that discourages the use of neighborhood roadways, particularly local streets. This through-traffic, including through truck traffic, shall be directed to appropriate routes in order to maintain public safety and local quality of life.*

Policy 5.A.6 *The County shall require all new development to provide off-street parking, either on-site or in consolidated lots or structures.*

Policy 5.A.7 The County shall develop and manage its roadway system to maintain the following minimum levels of service (LOS).

a. *LOS "C" on rural roadways, except within one-half mile of state highways where the standard shall be LOS "D".*

b. *LOS "C" on urban/suburban roadways except within one-half mile of state highways where the standard shall be LOS "D".*

The County may allow exceptions to these level of service (LOS) standards where it finds that the improvements or other measures required to achieve the LOS standards are unacceptable based on established criteria. In allowing any exception to the standards, the County shall consider the following factors:

- *The number of hours per day that the intersection or roadway segment would operate at conditions worse than the standard.*
- *The ability of the required improvement to significantly reduce peak hour delay and improve traffic operations.*
- *The right-of-way needs and the physical impacts on surrounding properties.*
- *The visual aesthetics of the required improvement and its impact on community identity and character.*
- *Environmental impacts including air quality and noise impacts.*
- *Construction and right-of-way acquisition costs.*
- *The impacts on general safety.*
- *The impacts of the required construction phasing and traffic maintenance.*
- *The impacts on quality of life as perceived by residents.*
- *Consideration of other environmental, social, or economic factors on which the County may base findings to allow an exceedance of the standards.*

Exceptions to the standards will only be allowed after all feasible measures and options are explored, including alternative forms of transportation.

Policy 5.A.8 *The County's LOS standards for the State highway system shall be no worse than LOS E.*

Policy 5.A.9 *The County shall work with neighboring jurisdictions to provide acceptable and compatible levels of service and joint funding on the roadways that may occur on the circulation network in the Town of Truckee, the unincorporated area, and adjacent Nevada County.*

Policy 5.A.10 The County shall strive to meet the level of service standards through a balanced transportation system that provides alternatives to the automobile.

Policy 5.A.11 The County shall plan and implement a complete road network to serve the needs of local traffic. This road network shall include roadways parallel to regional facilities so that the regional roadway system can function effectively and efficiently. Much of this network will be funded and/or constructed by new development.

Policy 5.A.12 It shall be at the discretion of the County if an analysis of traffic will be required for land development projects. Each such project shall construct or fund improvements necessary to mitigate the effects of traffic from the project. Such improvements may include a fair share of improvements that provide benefits to others.

Policy 5.A.13 The County shall secure financing in a timely manner for all components of the transportation system to achieve and maintain adopted level of service standards.

Policy 5.A.14 The County shall assess fees on new development sufficient to cover the fair share portion of that development's impacts on the local and regional transportation system.

Policy 5.A.15 Placer County shall participate with other jurisdictions and Caltrans in the planning and programming of improvements, as well as maintaining the adopted level of service (LOS), for the State Highway 267 in accordance with state and federal transportation planning and programming procedures, so as to maintain acceptable levels of service for Placer County residents in Martis Valley.

Policy 5.A.16 As a means of maintaining the rural character of the Plan Area, the County shall limit the number and extent of roadway cuts and fills required in construction, reconstruction, and road maintenance to a minimum consistent with standard design practices.

Policy 5.A.17 As a means of maintaining the rural character of the Plan Area, the County shall ensure that cut and fill slopes created by roadway, trail, and path construction and reconstruction activities will be re-vegetated with native plant materials.

Policy 5.A.18 The County shall coordinate the road network and alternative transportation systems within the Community Plan area with similar systems in surrounding areas.

Policy 5.A.19 The County shall require provisions for safe, convenient access to residences, businesses, and public facilities located in Martis Valley.

Policy 5.A.20 The County shall keep to a minimum the number of driveway encroachments along public roadways—particularly along Schaffer Mill Road, Northstar Drive and SR267.

Policy 5.A.21 *The County shall require development of a system or road connection between adjacent subdivisions and recreational areas for improved circulation.*

Transit

Goal 5.B: To promote a safe and efficient mass transit system, including both rail and bus, to reduce congestion, improve the environment, and provide viable non-automotive means of transportation in and through Martis Valley.

Policy 5.B.1 *The County shall work with transit providers to plan and implement additional transit services within and to the county that are timely, cost-effective, and responsive to growth patterns and existing and future transit demand.*

Policy 5.B.2 *The County shall consider the need for future transit right-of-way in reviewing and approving plans for development. Rights-of-way may either be exclusive or shared with other vehicles.*

Policy 5.B.3 *The County shall pursue all available sources of funding for transit services.*

Policy 5.B.4 *The County shall undertake, as funding permits, and participate in studies of inter-regional recreational transit services, such as rail, to the Sierra.*

Policy 5.B.5 *The County shall require development of transit services by ski resorts and other recreational providers in the Sierra to meet existing and future recreational demand.*

Policy 5.B.6 *The County shall consider the transit needs of senior, disabled, minority, low-income, and transit dependent persons in making decisions regarding transit services and in compliance with the Americans with Disabilities Act.*

Policy 5.B.7 *The County shall support efforts to provide demand-responsive service ("paratransit") and other transportation services for those unable to use conventional transit.*

Transportation Systems/Demand Management

Goal 5.C: To maximize the efficient use of transportation facilities so as to: 1) reduce travel demand on the county's roadway system; 2) reduce the amount of investment required in new or expanded facilities; 3) reduce the quantity of emissions of pollutants from automobiles; and 4) increase the energy-efficiency of the transportation system.

Policies

Policy 5.C.1 *The County shall promote the use of transportation systems management (TSM)/transportation demand management (TDM) programs that divert automobile commute trips to transit, walking, and bicycling.*

Policy 5.C.2 *The County shall promote the use, by both the public and private sectors, of TSM/TDM programs that increase the average occupancy of vehicles.*

Policy 5.C.3 *The County shall work with other responsible agencies to develop other measures to reduce vehicular travel demand and meet air quality goals.*

Policy 5.C.4 *During the development review process, the County shall require that proposed projects meet adopted Trip Reduction Ordinance (TRO) requirements.*

Non-Motorized Transportation

Goal 5.D: To provide a safe, comprehensive, and integrated system of facilities for non-motorized transportation.

Policy 5.D.1 *The County shall promote the development of a comprehensive and safe system of recreational and commuter bicycle routes that provides connections between the Plan Areas major employment and housing areas and between its existing and planned bikeways.*

Policy 5.D.2 *The County shall work with neighboring jurisdictions to coordinate planning and development of the Plan Area bikeways and multi-purpose trails with those of neighboring jurisdictions.*

Policy 5.D.3 *The County shall pursue all available sources of funding for the development and improvement of trails for non-motorized transportation (bikeways, pedestrian, and equestrian).*

Policy 5.D.4 *The County shall promote non-motorized travel (bikeways, pedestrian, and equestrian through appropriate facilities, programs, and information.*

Policy 5.D.5 *The County shall continue to require developers in finance and install pedestrian walkways, equestrian trails, and multi-purpose paths in new development, as appropriate.*

Policy 5.D.6 *The County shall support the development of parking areas near access to hiking and equestrian trails.*

Policy 5.D.7 *The County shall, where appropriate, require new development to provide sheltered public transit stops, with turnouts.*

Air Transportation

Goal 5.E To promote the maintenance and improvement of general and commercial aviation facilities within the parameters of compatible surrounding land uses.

Policies

Policy 5.E.1 *The County shall support the continued use of the Truckee-Tahoe Airport as a general purpose airport.*

Policy 5.E.2 *The County shall work with the Airport Land Use Commission in the planning of land uses around the Truckee-Tahoe Airport to ensure protection of airport operations from urban encroachment.*

Implementation Programs

1. *Review development projects for compliance with the goals, policies and specific discussions contained in the Transportation and Circulation Section and throughout the Plan.*

   Responsible Agency/Department: Land development Departments, Board of Supervisors

   Time frame: Ongoing
   Funding: Application fees

2. *Prepare and adopt an ordinance implementing traffic mitigation fees for the Roadway Capital Improvement Program.*

   Responsible Agency/Department: Department of Public Works, Board of Supervisors
   Time frame: On-going
   Funding: Road Fund/Fees

3. *Coordinate transportation planning with the Placer County Transportation Planning Agency, adjacent jurisdictions, and Caltrans.*

   Responsible Agency/Department: Department of Public Works
   Time frame: Ongoing
   Funding: Road Fund

4. *Develop funding sources for road-adjacent trails.*

   Responsible Agency/Department: Facilities Services
   Time frame: Ongoing
   Funding: General Fund/Fees

5. *Pursue other sources of funding for transportation improvements.*

   Responsible Agency/Department: County Executive, Department of Public Works
   Time frame: Ongoing
   Funding: General Fund/Road Fund

6. *Continue existing transportation construction and maintenance programs.*

   Responsible Agency/Department: Department of Public Works, Caltrans
   Time frame: Ongoing
   Funding: Varied

7. *The County shall work with the Placer County Transportation Planning Agency periodically reviewing and updating its short-range transit plan at least as often as required by State law.*

Responsible Agency/Department: Department of Public Works
Time frame: FY 99-00; every five years thereafter
Funding: Transportation Development Act funds

8. *The County shall adopt and implement funding mechanisms to support adopted transit plans throughout the County.*

Responsible Agency/Department: Department of Public Works
Time frame: Ongoing
Funding: Transportation Development Act funds

7. *The County shall require that bikeways recommended in the Bikeways/Trails Master Plan be development when street frontage improvements are required of new development.*

Responsible Agency/Department: Department of Public Works
Time frame: Ongoing
Funding: Developer fees, Application Fees

Mitigation Measures

The following mitigation measure shall be incorporated into the Implementation Programs portion of the Transportation and Circulation Section of the Martis Valley Community Plan. The following mitigation measure applies to PP, AA, AB and AC.

MM 4.~~4~~1.1a The County shall establish a capital improvement program for the land use map and roadway improvements ultimately approved by the County for the improvements identified in **Tables 4.4-20** through **4.4-25** (depending on the land use map adopted). This would include funding and coordination for traffic improvements associated with impacts identified in the Town of Truckee as well as to state highway facilities (SR 267 and SR 28). The County will establish a capital improvement program for the land use and roadway improvements identified in Tables 4.4-20 through 4.4-25 (depending on the land use map adopted) for impacts identified within Placer County's jurisdiction.

The County shall develop a mechanism whereby development within the plan area pays its fair share contributions toward transportation improvements outside of the County's jurisdiction as identified in this environmental document or as defined in project specific environmental impact reports.

The County shall complete a focused transit service plan for the Martis Valley area. This plan shall identify an appropriate and reasonable public transit program to accommodate future growth. The transit service plan shall develop a funding mechanism (potentially a CSA) and shall be the basis of developing agreements that provide for input from and coordination with the CSA, Placer County, Town of Truckee, and development stakeholders to ensure coordinated service and connections with adequate capacity and year-round service provisions. This plan shall be conducted after the completion of the Tahoe Area Regional Transit Short Range Transit Plan currently (May, 2003) being conducted by the Tahoe Regional Planning Agency and shall be consistent with this plan.

TABLE 4.4-20
2021 INTERSECTION LOS MITIGATION MEASURES FOR PP: PROPOSED LAND USE DIAGRAM

Roadway Network: Land Use: Intersection	Type of Control	Type of LOS	Season	All Connections		No Schaffer Mill Road Connections	
				Proposed Land Use Diagram		Proposed Land Use Diagram	
				LOS	Mitigation	LOS	Mitigation
SR 89/SR 267 Bypass/ I-80 Westbound	Traffic Signal	Total Int.	Summer	D	Add 2nd NBLTL = 2 Total	D	Add 2nd NBLTL = 2 Total
SR 89/SR 267 Bypass/ I-80 Eastbound	Traffic Signal	Total Int.	Summer	D	Add 2nd NBTL = 2 Total	D	Add 2nd NBTL = 2 Total
Donner Pass Road / I-80 Eastbound Off-Ramp	Stop-Controlled	Total Int.	Summer	C	Signalize	C	Signalize
Glenshire Drive/DPR (Existing SR 267)	Stop-Controlled	Total Int.	Summer	~~D~~C	Signalize Add EBRTL	~~D~~C	Signalize Add EBRTL
Bridge Street/ Donner Pass Road	Signal	Total Int.	Summer	E	Add NBFRTL + Acceleration Lane Add NBLTL (remove L/T shared) Add SBRTL	E	Add NBFRTL + Acceleration Lane Add NBLTL (remove L/T shared) Add SBRTL
Bridge Street/ West River Street	Stop-Controlled	Total Int.	Summer	D	Signalize Add SBTL	D	Add SBTL
Brockway Rd/ Martis Valley Rd	Stop-Controlled	Total Int.	Summer	B	Signalize	B	Signalize
267Bypass/267/ Brockway Rd/ Joerger Dr	Traffic Signal	Total Int.	Summer	D	Add 2nd NBLTL = 2 Total Add NBTL = 1 Total + T/R Shared Add EBFRTL + Acceleration Lane Add SBTL = 2 Total	D	Add 2nd NBLTL = 2 Total Add NBTL = 1 Total + T/R Shared Add EBFRTL + Acceleration Lane Add SBTL = 2 Total
SR 267/Airport Road/ Schaffer Mill Road	Traffic Signal	Total Int.	Winter/Summer	~~D~~E	Add 2 NBTL = 2 Total + T/R Shared Add SBTL = 2 Total Add ~~2~~ 1 EBLTL (remove L/T shared) Add EBT/R shared lane Add WBLTL (remove L/T shared) Add WBFRTL + Acceleration Lane	~~E~~E	Add 2NBTL = 2 Total + T/R Shared Add SBTL = 2 Total Add ~~2~~ 1 EBLTL (remove L/T shared) Add EBT/R shared lane Add WBLTL (remove L/T shared) Add WBFRTL + Acceleration Lane
SR 267/Northstar Drive	Stop-Controlled	Total Int.	Winter	D	Signalize Add NBTL Add EBLTL	D	Signalize Add NBTL Add EBLTL
SR 267/SR 28	Traffic Signal	Total Int.	Winter	~~D~~E	Add ~~WBFRTL +~~WBRTL ~~Acceleration Lane~~	~~E~~E	Add WB~~F~~RTL ~~+ Acceleration Lane~~
SR 89 South/ Donner Pass Road	Traffic Signal	Total Int.	Summer	D	Add NBLTL (remove L/T shared) Add SBRTL (remove T/R shared)	D	Add NBLTL (remove L/T shared) Add SBRTL (remove T/R shared)

KEY

NB= Northbound
SB= Southbound
EB= Eastbound
WB= Westbound
TL= Through Lane
LTL= Left-Turn Lane
RTL= Right-Turn Lane
FRT Free-Right Turn Lane

Notes
1Mitigation represents improvements needed to maintain LOS D/E in Truckee during summer weekday peak, LOS E in Placer County outside the Tahoe Basin during both winter weekend and summer peak weekday hours, and no more than 4 hours of LOS E within the Tahoe Basin during summer or winter hours.
2 All item listed are necessary in addition to the base case 2021 roadway geometry.

TABLE 4.4-21
EXTENT OF WIDENING REQUIRED ALONG NORTHSTAR DRIVE AND SCHAFFER MILL ROAD FOR EACH LAND USE ALTERNATIVE AND ROADWAY IMPROVEMENT OPTION

Roadway to Be Widened	Land Use Map Alternative	Roadway Improvement Option	Roadway Segment to be Widened to Four Lanes
Northstar Drive	PP	Proposed: No Schaffer Mill Road Connections	SR 267 to Basque Road
		All Connections	Widening Not Needed
	AA	Proposed: No Schaffer Mill Road Connections	Widening Not Needed
		All Connections	Widening Not Needed
	AB	Proposed: No Schaffer Mill Road Connections	SR 267 to Basque Road
		All Connections	Widening Not Needed
	AC	Proposed: No Schaffer Mill Road Connections	SR 267 to Basque Road
		All Connections	Widening Not Needed
Schaffer Mill Road	PP	Proposed: No Schaffer Mill Road Connections	Widening Not Needed~~SR 267 to Hopkins Access~~
		All Connections	Widening Not Needed~~SR 267 to Hopkins Access~~
	AA	Proposed: No Schaffer Mill Road Connections	SR 267 to Lahontan Access
		All Connections	SR 267 to Lahontan Access
	AB	Proposed: No Schaffer Mill Road Connections	SR 267 to Siller Access
		All Connections	SR 267 to Siller Access
	AC	Proposed: No Schaffer Mill Road Connections	SR 267 to Hopkins Access
		All Connections	SR 267 to Hopkins Access

TABLE 4.4-22
MITIGATED LOS FOR POTENTIALLY CRITICAL ARTERIAL ROADWAYS

	Mitigated Roadway Level Of Service (With Four Lane Roadway)		
	Existing Roadway Alt.	Proposed: 4-Lane SR 267, No Schaffer Mill Road Connections	4 Lane SR 267 Plus All Connections
Proposed Land Use Diagram			
SR 267 Bypass I-80 to Brockway Road	NA	NA	NA
SR 267 Brockway Road to Schaffer Mill Road	E	NA	NA
SR 267 Schaffer Mill Road to Northstar Drive	D	NA	NA
Schaffer Mill Road West of SR 267	~~A~~NA	~~A~~NA	~~A~~NA
Northstar Drive West of SR 267	A	A	NA
Existing Martis Valley General Plan			
SR 267 Bypass I-80 to Brockway Road	A	NA	NA
SR 267 Brockway Road to Schaffer Mill Road	E	NA	NA
SR 267 Schaffer Mill Road to Northstar Drive	D	NA	NA
Schaffer Mill Road West of SR 267	C	C	B
Northstar Drive West of SR 267	NA	NA	NA
Alternative 1			
SR 267 Bypass I-80 to Brockway Road	NA	NA	NA
SR 267 Brockway Road to Schaffer Mill Road	E	NA	NA
SR 267 Schaffer Mill Road to Northstar Drive	D	NA	NA
Schaffer Mill Road West of SR 267	B	B	B
Northstar Drive West of SR 267	A	A	NA
Alternative 2			
SR 267 Bypass I-80 to Brockway Road	NA	NA	NA
SR 267 Brockway Road to Schaffer Mill Road	E	NA	NA
SR 267 Schaffer Mill Road to Northstar Drive	D	NA	NA
Schaffer Mill Road West of SR 267	A	A	A
Northstar Drive West of SR 267	A	A	NA

Note 1: NA = Not applicable because no mitigation is required.

TABLE 4.4-23
INTERSECTION LOS MITIGATION MEASURES FOR AA: EXISTING MARTIS VALLEY GENERAL PLAN LAND USE MAP

Roadway Network:				All Connections		No Schaffer Mill Road Connections	
Land Use:				Existing Community Plan		Existing Community Plan	
Intersection	Type of Control	Type of LOS	Season	LOS	Mitigation	LOS	Mitigation
SR 89/SR 267 Bypass/ I-80 Westbound	Traffic Signal	Total Int.	Summer	D	Add WBLTL= 2 Total Add 2nd NBLTL = 2 Total	D	Add WBLTL = 2 Total Add 2nd NBLTL = 2 Total
SR 89/SR 267 Bypass/ I-80 Eastbound	Traffic Signal	Total Int.	Summer	C	Add EBFRTL + Acceleration Lane Add 2nd NBTL = 2 Total	C	Add EBFRTL + Acceleration Lane Add 2nd NBTL = 2 Total
Glenshire Drive/DPR (Existing SR 267)	Stop-Controlled	Total Int.	Summer	D	Signalize Add EBRTL	D	Signalize Add EBRTL
Bridge Street/ Donner Pass Road	Signal	Total Int.	Summer	E	Add NBFRTL + Acceleration Lane Add NBLTL (remove L/T shared) Add SBRTL	E	Add NBFRTL + Acceleration Lane Add NBLTL (remove L/T shared) Add SBRTL
Bridge Street /West River Street	Stop-Controlled	Total Int.	Summer	E	Signalize Add SBTL	E	Signalize Add SBTL
Old Brockway Rd/ Martis Valley Rd	Stop-Controlled	Total Int.	Summer	B	Signalize	C	Signalize
267Bypass/267/ Brockway Rd/Joerger Dr	Traffic Signal	Total Int.	Summer	D	Add 2 NBTL = 2 Total + T/R Shared Add 1SBTL = 2 Total Add 2nd NBLTL = 2 Total Add EBFRTL + Acceleration Lane	D	Add 2 NBTL = 2 Total + T/R Shared Add 2SBTL = 3 Total Add 2nd NBLTL = 2 Total Add EBFRTL + Acceleration Lane
SR 267/Airport Road/ Schaffer Mill Road	Traffic Signal	Total Int.	Summer	D	Add 3 NBTL = 3 Total + T/R Shared Add 2 SBTL = 3 Total Add 2 EBLTL (remove L/T shared) Add EBT/R shared lane Add WBLTL (remove L/T shared) Add WBFRTL + Acceleration Lane	E	Add 3 NBTL = 3 Total + T/R Shared Add 2 SBTL = 3 Total Add 2 EBLTL (remove L/T shared) Add EBT/R shared lane Add WBLTL (remove L/T shared) Add WBFRTL + Acceleration Lane
SR 267/Northstar Drive	Stop-Controlled	Total Int.	Winter	E	Signalize Add NBTL Add EBLTL	E	Signalize Add NBTL Add EBLTL
SR 267/SR 28	Traffic Signal	Total Int.	Winter	E	Add WBFRTL + Acceleration Lane	E	Add WBFRTL + Acceleration Lane
SR 89 South/ Donner Pass Road	Traffic Signal	Total Int.	Summer	D	Add NBLTL (remove L/T shared) Add SBRTL (remove T/R shared)	D	Add NBLTL (remove L/T shared) Add SBRTL (remove T/R shared)

KEY
NB= Northbound
SB= Southbound
EB= Eastbound
WB= Westbound
TL= Through Lane
LTL= Left-Turn Lane
RTL= Right-Turn Lane
FRT Free-Right Turn Lane

1 Mitigation represents improvements needed to maintain LOS D/E in Truckee during summer peak weekday peak, LOS E in Placer County outside the Tahoe Basin during both winter weekend and summer peak weekday hours, and no more than 4 hours of LOS E within the Tahoe Basin during summer or winter hours.
2 All item listed are necessary in addition to the base case 2021 roadway geometry.

TABLE 4.4-24
INTERSECTION LOS MITIGATION MEASURES FOR AB: ALTERNATIVE 1 LAND USE MAP

Roadway Network: Land Use: Intersection	Type of Control	Type of LOS	Season	All Connections Alternative 1 LOS	All Connections Alternative 1 Mitigation	No Schaffer Mill Road Connections Alternative 1 LOS	No Schaffer Mill Road Connections Alternative 1 Mitigation
SR 89/SR 267 Bypass/ I-80 Westbound	Traffic Signal	Total Int.	Summer	D	Add WBLTL = 2 Total Add 2nd NBLTL = 2 Total	D	Add WBLTL = 2 Total Add 2nd NBLTL = 2 Total
SR 89/SR 267 Bypass/ I-80 Eastbound	Traffic Signal	Total Int.	Summer	D	Add 2nd NBTL = 2 Total	C	Add EBFRTL + Acceleration Lane Add 2nd NBTL = 2 Total
Glenshire Drive/DPR (Existing SR 267)	Stop-Controlled	Total Int.	Summer	D	Signalize Add EBRTL	D	Signalize Add EBRTL
Bridge Street/ Donner Pass Road	Signal	Total Int.	Summer	E	Add NBFRTL + Acceleration Lane Add NBLTL (remove L/T shared) Add SBRTL	E	Add NBFRTL + Acceleration Lane Add NBLTL (remove L/T shared) Add SBRTL
Bridge Street/ West River Street	Stop-Controlled	Total Int.	Summer	E	Signalize Add SBTL	D	Signalize Add SBTL
Brockway Rd/ Martis Valley Rd	Stop-Controlled	Total Int.	Summer	B	Signalize	B	Signalize
267 Bypass/267/ Brockway Rd/Joerger Dr	Traffic Signal	Total Int.	Summer	D	Add 2 NBTL = 2 Total + T/R Shared Add SBTL = 2 Total Add 2nd NBLTL = 2 Total Add EBFRTL + Acceleration Lane	D	Add 2 NBTL = 2 Total + T/R Shared Add SBTL = 2 Total Add 2nd NBLTL = 2 Total Add EBFRTL + Acceleration Lane
SR 267/Airport Road/ Schaffer Mill Road	Traffic Signal	Total Int.	Summer	D	Add 2 NBTL = 2 Total + T/R Shared Add SBTL = 2 Total Add 2 EBLTL (remove L/T shared) Add EBT/R shared lane Add WBLTL (remove L/T shared) Add WBFRTL + Acceleration Lane	E	Add 2 NBTL = 2 Total + T/R Shared Add SBTL = 2 Total Add 2 EBLTL (remove L/T shared) Add EBT/R shared lane Add WBLTL (remove L/T shared) Add WBFRTL + Acceleration Lane
SR 267/Northstar Drive	Stop-Controlled	Total Int.	Winter	D	Signalize Add NBTL Add EBLTL	D	Signalize Add NBTL Add EBLTL
SR 267/SR 28	Traffic Signal	Total Int.	Winter	E	Add WBRTL	E	Add WBRTL
SR 89 South/ Donner Pass Road	Traffic Signal	Total Int.	Summer	D	Add NBLTL (remove L/T shared) Add SBRTL (remove T/R shared)	D	Add NBLTL (remove L/T shared) Add SBRTL (remove T/R shared)

KEY
NB= Northbound
SB= Southbound
EB= Eastbound
WB= Westbound
TL= Through Lane
LTL= Left-Turn Lane
RTL= Right-Turn Lane
FRT Free-Right Turn Lane

1 Mitigation represents improvements needed to maintain LOS D/E in Truckee during summer weekday peak, LOS E in Placer County outside the Tahoe Basin during both winter weekend and summer peak weekday hours, and no more than 4 hours of LOS E within the Tahoe Basin during summer or winter hours.
2 All item listed are necessary in addition to the base case 2021 roadway geometry.

TABLE 4.4-25
INTERSECTION LOS MITIGATION MEASURES FOR AC: ALTERNATIVE 2 LAND USE MAP

Roadway Network: Land Use: Intersection	Type of Control	Type of LOS	Season	All Connections Alternative 2 LOS	All Connections Alternative 2 Mitigation	No Schaffer Mill Road Connections Alternative 2 LOS	No Schaffer Mill Road Connections Alternative 2 Mitigation
SR 89/SR 267 Bypass/ I-80 Westbound	Traffic Signal	Total Int.	Summer	D	Add 2nd NBLTL = 2 Total	D	Add 2nd NBLTL = 2 Total
SR 89/SR 267 Bypass/ I-80 Eastbound	Traffic Signal	Total Int.	Summer	D	Add 2nd NBTL = 2 Total	D	Add 2nd NBTL = 2 Total
Glenshire Drive/DPR (Existing SR 267)	Stop-Controlled	Total Int.	Summer	D	Signalize Add EBRTL	D	Signalize Add EBRTL
Bridge Street/ Donner Pass Road	Signal	Total Int.	Summer	E	Add NBFRTL + Acceleration Lane Add NBLTL (remove L/T shared) Add SBRTL	E	Add NBFRTL + Acceleration Lane Add NBLTL (remove L/T shared) Add SBRTL
Bridge Street/ West River Street	Stop-Controlled	Total Int.	Summer	D	Signalize Add 2nd SBTL	D	Signalize Add 2nd SBTL
Old Brockway Rd/ Martis Valley Rd	Stop-Controlled	Total Int.	Summer	B	Signalize	B	Signalize
267 Bypass/267/ Brockway Rd/Joerger Dr	Traffic Signal	Total Int.	Summer	D	Add 2nd NBLTL = 2 Total Add NBTL = 1 Total + T/R Shared Add EBFRTL + Acceleration Lane Add SBTL = 2 Total	D	Add 2nd NBLTL = 2 Total Add NBTL = 1 Total + T/R Shared Add EBFRTL + Acceleration Lane Add SBTL = 2 Total
SR 267/Airport Road/ Schaffer Mill Road	Traffic Signal	Total Int.	Summer	E	Add NBTL = 1 Total + T/R Shared Add SBTL = 2 Total Add 2 EBLTL (remove L/T shared) Add EBT/R shared lane Add WBLTL (remove L/T shared) Add WBFRTL + Acceleration Lane	E	Add NBTL = 1 Total + T/R Shared Add SBTL = 2 Total Add 2 EBLTL (remove L/T shared) Add EBT/R shared lane Add WBLTL remove L/T shared) Add WBFRTL + Acceleration Lane
SR 267/Northstar Drive	Stop-Controlled	Total Int.	Winter	E	Signalize Add NBTL	D	Signalize Add NBTL Add EBLTL
SR 267/SR 28	Traffic Signal	Total Int.	Winter	E	Add WBRTL	E	Add WBRTL
SR 89 South/ Donner Pass Road	Traffic Signal	Total Int.	Summer	D	Add NBLTL (remove L/T shared) Add SBRTL (remove T/R shared)	D	Add NBLTL (remove L/T shared) Add SBRTL (remove T/R shared)

KEY
NB= SB= Southbound WB= Westbound TL= Through Lane RTL= Right-Turn Lane FRT Free-Right Turn Lane

1 Mitigation represents improvements needed to maintain LOS D/E in Truckee during summer peak weekday peak, LOS E in Placer County outside the Tahoe Basin during both winter weekend and summer peak weekday hours, and no more than 4 hours of LOS E within the Tahoe Basin during summer or winter hours.
2 All item listed are necessary in addition to the base case 2021 roadway geometry.

Please note that a modern roundabout may be suitable mitigation for intersections that are identified to need a traffic signal. In addition, while the TRPA establishes a LOS D threshold for intersections, it also indicates that LOS E is suitable so long as the LOS E condition is not exceeded for more than 4 hours of the day. Therefore, the mitigation measures identified for the SR 28/SR 267 intersection represent the improvements needed to provide LOS D at the intersection for all but 4 hours per day during which the LOS is E. This conclusion was validated by a review of both summer and winter traffic data along SR 267 and SR 28, which determined that the 5th highest peak hour traffic volumes are between 60 percent and 80 percent of the peak hour. The LOS analysis indicates that the 5th highest peak-hour traffic volumes would result in a LOS D or better for at least 20 hours of the day in the case that the intersection operates at a LOS E during the peak hour.

As shown in **Tables 4.4-16 and 4.4-22**, the Proposed Land Use Diagram, Alternative 1 and 2 could avoid the need to 4-lane SR 267 from Schaffer Mill Road to Northstar Drive if the Northstar Connector is constructed.

Poor LOS conditions requiring intersection improvements at the Bridge Street/West River Street and Bridge Street/Donner Pass Road intersection for all the land use map alternatives could instead be mitigated by constructing a new roadway (including an additional railroad crossing and Truckee River crossing) to the east of Bridge Street, as identified in the Town of Truckee Downtown Specific Plan (Truckee, 1997). This improvement is part of the Downtown Specific Plan, but was not included in the Town's 2021 roadway network. The Town of Truckee AB 1600 Capital Improvement Program identifies 3 million dollars for an easterly railroad undercrossing, with an additional 3 million dollars coming from other sources, primarily from the developer of the "balloon track" site located south of Glenshire Drive and east of Bridge Street. The Town of Truckee estimates that this facility could divert 41 percent of the traffic off of Bridge Street. However, no preferred alignment has been identified by the Town. Development of this facility could result in impacts to the Truckee River as well as other biological and historic resources in the Truckee Downtown area.

Since the specific design of these roadway improvements has yet to be determined, it is not possible to determine the exact extent of the environmental effects of these improvements. However, these improvements may result in temporary surface water quality, air quality and noise impacts associated with construction; operational noise and air quality impacts; biological resource impacts associated with construction and operation; and cultural resource impacts (especially with conflicts with historic resources in the Truckee Downtown area).

While implementation of the some of the above identified mitigation measures are within the jurisdiction of Placer County to implement, other mitigation measures would require coordination with other jurisdictions (Town of Truckee and Caltrans) to implement and are not under control of the County. In some cases these improvements are identified in capital improvement programs, while other improvements have not been programmed (e.g., widening of SR 267 to 4 lanes). Given the unknown nature of the timing and funding of these improvements under the 3 jurisdictions (Placer County, Town of Truckee and Caltrans), this impact is considered **significant and unavoidable**.

Optional Mitigation Measure

MM 4.4.1b Reduce Land Use Quantities in Martis Valley Community Plan Area.

Alternately, under any of the alternatives, the land uses allowed under each land use alternative could be reduced to eliminate the need to widen roadways, particularly SR 267, Northstar Drive, and Schaffer Mill Road.

Under the Proposed Land Use Diagram, the list of roadways which have volumes that exceed LOS standards are shown in **Table 4.4-26**, as well as the reduction in land uses needed to maintain LOS standards. The reduction in ADT (or PM peak-hour one-way trips in the Town of Truckee) that would be required to avoid the need to widen particular roadways to 4 lanes is also shown in the table. These tables are meant for programmatic planning purposes only. Please note that the location of any trip reductions have a relatively minor impact on whether the traffic volumes would be reduced to adequate levels. For SR 267, the reduction shown indicates the reduction needed in traffic generation for the overall Martis Valley area. For Northstar Drive, the reduction required refers to the total traffic generation of Northstar developments. Finally, the reduction needed for Schaffer Mill Road refers to the reduction needed in traffic generation associated with land uses that are proposed to gain access on Schaffer Mill Road (Lahontan, Siller Ranch, Eaglewood, and Hopkins Ranch).

For example, in order to avoid the need to 4-lane SR 267 from Schaffer Mill Road to ~~Northstar Drive~~Waddle Ranch, the total trip generation for the area would need to be reduced by approximately 10 percent. ~~Similarly, the total trip generation along Schaffer Mill Road would need to be reduced by 5 percent unless the Northstar Connector is built or both the Northstar Connector and Palisades connectors are built, in which case the trip generation would need to be reduced by 20 percent or 15 percent, respectively.~~

TABLE 4.4-26
REDUCTIONS IN MARTIS VALLEY TRIP GENERATION NECESSARY TO MAINTAIN ADEQUATE ROADWAY LOS FOR THE PROPOSED LAND USE DIAGRAM (PP)

	Reduction in Traffic Generation Needed to Avoid Exceeding the Capacity of a 2-Lane Roadway/Reduction in Trips Required		
Roadway	**2021 Existing Roadway**	**Proposed: 4-Lane SR 267, No Schaffer Mill Road Connections**	**All Connections**
SR 267 Bypass Between I-80 and Brockway Road	Note 1	Note 1	Note 1
SR 267 Between Brockway Road and Airport Road/Schaffer Mill Road	90%/~~15~~13,000 ADT	--	--
SR 267 Between Airport Road/Schaffer Mill Road and ~~Northstar Drive~~Waddle Ranch Access (1)	25%/~~3,000~~2,500 ADT	--	Note 2
~~Schaffer Mill Road West of SR 267 (West end of widening varies)~~	~~5%/500 ADT~~	~~5%/500 ADT~~	~~15%/2,000 ADT~~
Northstar Drive Between SR 267 and Basque Drive (~~23~~)	~~10~~5%/~~1,~~500 ADT or Note 3	5%/500 ADT or Note 3~~10%/1,500 ADT or Note 3~~	---

Note 1: Four lane SR 267 not required between I-80 and Brockway Road for any roadway alternative under this land use scenario.
Note 2: Four lane SR 267 is not required between Schaffer Mill Road and Northstar Drive if Northstar Connector is built.
Note 3: Four lane Northstar Drive is not required if Northstar Connector is built.

As indicated, a very substantial reduction in land use in the Placer County portion of Martis Valley would be required to avoid exceeding the 2-lane capacity of SR 267 between Brockway Road and Airport Road/Schaffer Mill Road, as future growth in traffic associated with both through traffic and traffic generated by the build-out of the Truckee General Plan is forecast to consume most of the available roadway capacity. This table also reflects the conclusion that providing new connections to Schaffer Mill Road would increase through traffic on this roadway, thereby increasing the reduction in land use required to avoid exceeding the capacity of a 2-lane roadway.

Under the Existing Martis Valley General Plan Land Use Map, the list of roadways which have volumes that exceed LOS standards are shown in **Table 4.4-27**, as well as the reduction in land uses needed to maintain LOS standards.

TABLE 4.4-27
REDUCTIONS IN MARTIS VALLEY TRIP GENERATION NECESSARY TO MAINTAIN ADEQUATE ROADWAY LOS FOR THE EXISTING MARTIS VALLEY GENERAL PLAN LAND USE MAP ALTERNATIVE (AA)

	Reduction in Traffic Generation Needed to Avoid Exceeding the Capacity of a 2-Lane Roadway/Reduction in Trips Required		
Roadway	**2021 Existing Roadway**	**Proposed: 4-Lane SR 267, No Schaffer Mill Road Connections**	**All Connections**
SR 267 Bypass Between I-80 and Brockway Road	5%/50 P.M. Peak-Hour Trips per Direction per Lane	Note 1	Note 1
SR 267 Between Old Brockway Road and Airport Road/Schaffer Mill Road	90%/ 20,000 ADT	--	--
SR 267 Between Airport Road/Schaffer Mill Road and Northstar Drive(1)	35%/4,500 ADT	--	--
Schaffer Mill Road West of SR 267 (West end of widening varies)	45%/10,500 ADT	45%/10,500 ADT	40%/9,000ADT
Northstar Drive Between SR 267 and Basque Drive	Note 2	Note 2	Note 2

Note 1 Four lane SR 267 not required between I-80 and Broadway Road for any roadway alternative under this land use scenario.
Note 2: Four-lane Northstar Drive is not required.

Under the Alternative 1 Land Use Map, the list of roadways which have volumes that exceed LOS standards are shown in **Table 4.4-28**, as well as the reduction in land uses needed to maintain LOS standards.

TABLE 4.4-28
REDUCTIONS IN MARTIS VALLEY TRIP GENERATION NECESSARY TO MAINTAIN ADEQUATE ROADWAY LOS FOR THE ALTERNATIVE 1 LAND USE MAP (AB)

	Reduction in Traffic Generation Needed to Avoid Exceeding the Capacity of a 2-Lane Roadway/Reduction in Trips Required		
Roadway	**2021 Existing Roadway**	**Proposed: 4-Lane SR 267, No Schaffer Mill Road Connections**	**All Connections**
SR 267 Bypass Between I-80 and Brockway Road	Note 1	Note 1	Note 1
SR 267 Between Old Brockway Road and Airport Road/Schaffer Mill Road	90%/17,000 ADT	--	--
SR 267 Between Airport Road/Schaffer Mill Road and Northstar Drive(1)	20%/2,000 ADT	--	Note 2
Schaffer Mill Road West of SR 267 (West end of widening varies)	45%/10,000 ADT	45%/10,000 ADT	40%/9,000 ADT
Northstar Drive Between SR 267 and Basque Drive(2)	10%/1,500 ADT or Note 3	10%/1,500 ADT or Note 3	---

Note 1 Four lane SR 267 not required between I-80 and Broadway Road for any roadway alternative under this land use scenario.
Note 2: Four lane SR 267 is not required between Schaffer Mill Road and Northstar Drive if Northstar Connector is built.
Note 3: Four lane Northstar Drive is not required if Northstar Connector is built.

Under the Alternative 2 Land Use Map, the list of roadways which have volumes that exceed LOS standards are shown in **Table 4.4-29**, as well as the reduction in land uses needed to maintain LOS standards.

TABLE 4.4-29
REDUCTIONS IN MARTIS VALLEY TRIP GENERATION NECESSARY TO MAINTAIN ADEQUATE ROADWAY LOS FOR THE ALTERNATIVE 2 LAND USE MAP (AC)

	Reduction in Traffic Generation Needed to Avoid Exceeding the Capacity of a 2-Lane Roadway/Reduction in Trips Required		
Roadway	2021 Existing Roadway	Proposed: 4-Lane SR 267, No Schaffer Mill Road Connections	All Connections
SR 267 Bypass Between I-80 and Brockway Road	Note 1	Note 1	Note 1
SR 267 Between Old Brockway Road and Airport Road/Schaffer Mill Road	85%/13,000 ADT	--	--
SR 267 Between Airport Road/Schaffer Mill Road and Northstar Drive(2)	10%/800 ADT	--	Note 2
Schaffer Mill Road West of SR 267 (West end of widening varies)	5%/500 ADT	5%/500 ADT	15%/2,000 ADT
Northstar Drive Between SR 267 and Basque Drive (3)	10%/1,000 ADT or Note 3	10%/1,000 ADT or Note 3	Note 3

Note 1: Four lane SR 267 not required between I-80 and Brockway Road for any roadway alternative under this land use scenario.
Note 2: Four lane SR 267 is not required between Schaffer Mill Road and Northstar Drive if Northstar Connector is built.
Note 3: Four lane Northstar Drive is not required if Northstar Connector is built.

Implementation of the traffic volumes for the land use map alternatives would also result in improved operation of impacted intersections.

Impact 4.4.2 Traffic Impacts to Local Residential Roadways

PP Implementation of the Proposed Land Use Diagram would result in an increase in traffic volumes along local residential roadways in the Sierra Meadows/Ponderosa Palisades area if the Palisades connection is made. This would be a **potentially significant** impact.

AA Implementation of the Existing Martis Valley General Plan Land Use Map would result in an increase in traffic volumes along local residential roadways in the Sierra Meadows/Ponderosa Palisades area if the Palisades connection is made. This would be a **potentially significant** impact.

AB Implementation of the Alternative 1 Land Use Map would result in an increase in traffic volumes along local residential roadways in the Sierra Meadows/Ponderosa Palisades area if the Palisades connection is made. This would be a **potentially significant** impact.

AC Implementation of the Proposed Land Use Diagram would result in an increase in traffic volumes along local residential roadways in the Sierra

Meadows/Ponderosa Palisades area if the Palisades connection is made. This would be a **potentially significant** impact.

PP Proposed Land Use Diagram

The majority of the proposed Martis Valley Community Plan transportation-related goals and policies are a duplication of those policies pertaining to the Martis Valley area presented in the Placer County General Plan. While there are several additional policies proposed in the Martis Valley Community Plan, these added policies are not in conflict with the General Plan goals and policies.

There is, however, a potential conflict with established (as well as proposed) policy *if* a general traffic roadway connection is made between the Martis Valley area and the existing local roadways in the Sierra Meadows/Ponderosa Palisades area. Specifically, General Plan Policy 3.A.5 (replicated as proposed Martis Valley CP Policy 5.A.5.) states that "*The County shall require that through-traffic be accommodated in a manner that discourages the use of neighborhood roadways, particularly local streets. This through-traffic, including through truck traffic, shall be directed to appropriate routes in order to maintain public safety and local quality of life*." Furthermore, as discussed above, a maximum volume of 2,000 ADT is established as the standard for a local residential street with front-on lots.

One of the roadway network alternatives evaluated as part of this study would provide connections between the northeastern portion of the Martis Valley area and existing local residential streets in the Sierra Meadows/Ponderosa Palisades area (portions of which lie in both Placer County and the Town of Truckee). A total of three existing roadways have been "stubbed out" to allow potential connections to the south. Due to the geography of the area and the presence of existing development, there does not appear to be a feasible alignment by which to accomplish this connection without the use of an existing residential roadway. Conversely, it is possible to design a connection from Big Springs Road and Schaffer Mill Road that would not impact an existing residential roadway with lots fronting on the roadway. However, it should be noted that while Big Springs Drive does have lots that front directly on the roadway, it is considered a collector roadway and not a local street.

While the level of analysis conducted for this environmental analysis cannot identify traffic volumes on the specific roadways (as these volumes would be impacted by specific development plans not currently available, as well as specific roadway alignments that would require detailed engineering studies to identify), the traffic analysis conducted as part of this environmental study did identify the ADT traffic volumes in 2020 for the roadway connections as a whole, as shown in **Table 4.4-30**.

TABLE 4.4-30
ADT RESULTING ON ROADWAY CONNECTIONS UNDER EACH LAND USE ALTERNATIVE

Land Use Alternative	Northstar Connection Only Built	Northstar Connection and Palisades Connection Built	
	ADT Along Northstar Connector (1)	ADT Along Northstar Connector (1)	ADT Along Palisades Connector (2)
Proposed Land Use (PP)	~~4,980~~4800	4,~~620~~440	~~1,890~~1,470
Existing Martis Valley GP (AA)	4,340	3,780	2,650
Alternative 1 (AB)	5,250	4,390	2,960
Alternative 2 (AC)	5,090	4,730	1,850

Note 1: Between Northstar and Siller Brothers and Lahontan.
Note 2: Total of all potential connectors.

Note that the traffic volumes presented for the Palisades Connector would be added to existing traffic on the residential roadways. In light of these levels of through traffic activity that would be added to local streets, it can be concluded that provision of one or more northern connections to residential streets in existing neighborhoods would constitute a significant impact, in that it would conflict with General Plan Policy 3.A.5, as well as with the traffic volume standard for residential local streets identified for this study.

AA Existing Martis Valley General Plan Land Use Map

Implementation of the Martis Valley Community Plan Update under the Existing Martis Valley General Plan Land Use Map would result in more severe traffic impacts to local residential streets associated with Sierra Meadows/Ponderosa Palisades area as compared to the Proposed Land Use Diagram if these connections are made (see **Table 4.4-30**).

AB Alternative 1 Land Use Map

Implementation of the Martis Valley Community Plan Update under the Alternative 1 Land Use Map would result in more severe traffic impacts to local residential streets associated with Sierra Meadows/Ponderosa Palisades area as compared to the Proposed Land Use Diagram if these connections are made (see **Table 4.4-30**).

AC Alternative 2 Land Use Map

Implementation of the Martis Valley Community Plan Update under the Alternative 2 Land Use Map would result in less severe traffic impacts to local residential streets associated with Sierra Meadows/Ponderosa Palisades area as compared to the Proposed Land Use Diagram if these connections are made (see **Table 4.4-30**).

Policies and Implementation Programs

New developmental projects in the Plan area would be required to adhere to policies and implementation programs of the Martis Valley Community Plan, which are listed below. Compliance with these plan policies and implementation programs would provide some mitigation to traffic impacts.

Policy 5.A.5. *The County shall require that through-traffic be accommodated in a manner that discourages the use of neighborhood roadways, particularly local streets. This through-traffic, including through truck*

traffic, shall be directed to appropriate routes in order to maintain public safety and local quality of life.

Mitigation Measures

The following mitigation measures apply to all the land use map alternatives (PP, AA, AB, and AC).

The Transportation Section of the Martis Valley Community Plan shall be modified by the following mitigation measures.

MM 4.4.2a The Circulation Diagram shall not allow public roadway access to the Sierra Meadows/Ponderosa Palisades area.

MM 4.4.2b The Northstar Connector (if ultimately included as part of the Circulation Diagram as a public roadway) shall be designed to accommodate projected traffic volumes with minimal local residential roadway connections. Residential lots shall be restricted from having direct access onto the Connector.

As described under Impact 4.4.1, construction of the Palisades Connector in the absence of the Northstar Connector would not reduce traffic volumes on SR 267 between Airport Road/Schaffer Mill Road and Brockway Road sufficient to avoid the need to provide 4 travel lanes as mitigation to the LOS F along this roadway segment. In addition, while the provision of a Palisades Connector does reduce traffic volumes along Schaffer Mill Road, it does not reduce traffic volumes sufficient to avoid the need to provide 4 lanes along Schaffer Mill Road as mitigation to the LOS F condition along this roadway segment.

Implementation of the above mitigation measure would reduce potential conflicts associated with traffic levels on existing residential streets **less than significant** for the Proposed Land Use Diagram and land use map alternatives AA through AC by prohibiting the Palisades Connector and requiring proper design of the Northstar Connector if ultimately included as part of the Community Plan as a public roadway.

Impact 4.4.3 Potential Hazards Because of Design or Incompatible Uses

PP Implementation of the Proposed Land Use Diagram is not expected to result in significant traffic hazards. This is considered a **less than significant** impact.

AA Implementation of the Existing Martis Valley General Plan Land Use Map is not expected to result in significant traffic hazards. This is considered a **less than significant** impact.

AB Implementation of the Alternative 1 Land Use Map is not expected to result in significant traffic hazards. This is considered a **less than significant** impact.

AC Implementation of the Alternative 2 Land Use Map is not expected to result in significant traffic hazards. This is considered a **less than significant** impact.

PP-AC Proposed Land Use Diagram and Alternatives AA through AC

Under any of the land use alternatives evaluated as part of this study, traffic volumes on study area roadways will increase substantially over the next 20 years. With increasing traffic activity, traffic accidents can be expected to increase. As discussed in Section 4.4.1, above, overall accident rates for the regional roadway system are not unduly high. In addition, there are no specific design features that result in undue accident patterns. Several proposed policies address the need to minimize hazards that could result from poor roadway design or incompatible land uses, such as proposed Policy 5.A.2 and 5.A.4. In addition to these policies, the County maintains standards that govern new street construction and access to ensure that improvements are implemented in accordance with safe design standards. Therefore, each of the land use alternatives would have a less than significant impact relative to this issue.

Mitigation Measures

None required.

Impact 4.4.4 Inadequate Parking Capacity

PP Implementation of the Proposed Land Use Diagram is not expected to result in parking capacity impacts. This is considered a **less than significant** impact.

AA Implementation of the Existing Martis Valley General Plan Land Use Map is not expected to result in parking capacity impacts. This is considered a **less than significant** impact.

AB Implementation of the Alternative 1 Land Use Map is not expected to result in parking capacity impacts. This is considered a **less than significant** impact.

AC Implementation of the Alternative 2 Land Use Map is not expected to result in parking capacity impacts. This is considered a **less than significant** impact.

PP-AC Proposed Land Use Diagram and Alternatives AA through AC

The Martis Valley Community Plan Update is not expected to result in a significant impact on parking capacity on an area-wide basis, as parking supply is a requirement addressed at the individual development project approval level. The provision of adequate parking is addressed, however, under Policy 5.A.6. In combination with existing County parking ordinances, the existing General Plan would have a less than significant impact relative to this issue.

Mitigation Measures

None required.

Impact 4.4.5 Conflicts with Transit

PP Implementation of the Proposed Land Use Diagram is not expected to result in conflicts with transit. This is considered a **less than significant** impact.

AA Implementation of the Existing Martis Valley General Plan Land Use Map is not expected to result in conflicts with transit. This is considered a **less than significant** impact.

AB Implementation of the Alternative 1 Land Use Map is not expected to result in conflicts with transit. This is considered a **less than significant** impact.

AC Implementation of the Alternative 2 Land Use Map is not expected to result in conflicts with transit. This is considered a **less than significant** impact.

PP-AC Proposed Land Use Diagram and Alternatives AA through AC

The proposed Martis Valley Community Plan includes several proposed policies associated with the provision of transit services. These include the following:

Policies and Implementation Programs

Policy 5.B.1 The County shall work with transit providers to plan and implement additional transit services within and to the county that are timely, cost-effective, and responsive to growth patterns and existing and future transit demand.

Policy 5.B.2 The County shall consider the need for future transit right-of-way in reviewing and approving plans for development. Rights-of-way may either be exclusive or shared with other vehicles.

Policy 5.B.3 The County shall pursue all available sources of funding for transit services.

Policy 5.B.4 The County shall undertake, as funding permits, and participate in studies of inter-regional recreational transit services, such as rail, to the Sierra.

Policy 5.B.5 The County shall require development of transit services by ski resorts and other recreational providers in the Sierra to meet existing and future recreational demand.

Policy 5.B.6 The County shall consider the transit needs of senior, disabled, minority, low-income, and transit-dependent persons in making decisions regarding transit services and in compliance with the Americans with Disabilities Act.

Policy 5.B.7 The County shall support efforts to provide demand-responsive service ("paratransit") and other transportation services for those unable to use conventional transit.

Policy 5.C.1 *The County shall promote the use of transportation systems management (TSM)/transportation demand management (TDM) programs that divert automobile commute trips to transit, walking, and bicycling.*

Policy 5.C.4 *During the development review process, the County shall require that proposed projects meet adopted Trip Reduction Ordinance (TRO) requirements.*

Policy 5.D.2 *The County shall, where appropriate, require new development to provide sheltered public transit stops, with turnouts.*

Implementation Programs

1. *Review development projects for compliance with the goals, policies and specific discussions contained in the Transportation and Circulation Section and throughout the Plan.*

   Responsible Agency/Department: Land development Departments, Board of Supervisors
   Time frame: Ongoing
   Funding: Application fees

7. *The County shall work with the Placer County Transportation Planning Agency periodically reviewing and updating its short-range transit plan at least as often as required by State law.*

   Responsible Agency/Department: Department of Public Works
   Time frame: FY 99-00; every five years thereafter
   Funding: Transportation Development Act funds

8. *The County shall adopt and implement funding mechanisms to support adopted transit plans throughout the County.*

   Responsible Agency/ Department: Department of Public Works
   Time frame: Ongoing
   Funding: Transportation Development Act funds

None of the proposed land use map alternatives are expected to result in conflicts with existing or future transit service. Thus, the proposed Martis Valley Community Plan is expected to have a less than significant impact on transit service.

Mitigation Measures

None required.

Impact 4.4.6 Conflicts with Pedestrian and Bicycle Uses

PP Implementation of the Proposed Land Use Diagram is not expected to result in conflicts with pedestrian and bicycle uses. This is considered a **less than significant** impact.

AA Implementation of the Existing Martis Valley General Plan Land Use Map is not expected to result in conflicts with pedestrian and bicycle uses. This is considered a **less than significant** impact.

AB Implementation of the Alternative 1 Land Use Map is not expected to result in conflicts with pedestrian and bicycle uses. This is considered a **less than significant** impact.

AC Implementation of the Alternative 2 Land Use Map is not expected to result in conflicts with pedestrian and bicycle uses. This is considered a **less than significant** impact.

PP-AC ***Proposed Land Use Diagram and Alternatives AA through AC***

Policies and Implementation Programs

The proposed Martis Valley Community Plan includes several proposed policies associated with the provision of pedestrian and bicycle ues. These include the following:

Policy 5.A.3 *The County shall require that roadway rights-of way be wide enough to accommodate the travel lanes needed to carry long-range forecasted traffic volumes (beyond 2021), as well as any planned bikeways and required drainage, utilities, landscaping, and suitable separations.*

Policy 5.C.1 *The County shall promote the use of transportation systems management (TSM)/transportation demand management (TDM) programs that divert automobile commute trips to transit, walking, and bicycling.*

Policy 5.C.4 *During the development review process, the County shall require that proposed projects meet adopted Trip Reduction Ordinance (TRO) requirements.*

Policy 5.D.1 *The County shall promote the development of a comprehensive and safe system of recreational and commuter bicycle routes that provides connections between the County's major employment and housing areas and between its existing and planned bikeways.*

Policy 5.D.2 *The County shall work with neighboring jurisdictions to coordinate planning and development of the County's bikeways and multi-purpose trails with those of neighboring jurisdictions.*

Policy 5.D.3 *The County shall pursue all available sources of funding for the development and improvement of trails for non-motorized transportation (bikeways, pedestrian, and equestrian).*

Policy 5.D.4 *The County shall promote non-motorized travel (bikeways, pedestrian, and equestrian) through appropriate facilities, programs, and information.*

Policy 5.D.5 *The County shall continue to require developers to finance and install pedestrian walkways, equestrian trails, and multi-purpose paths in new development, as appropriate.*

Policy 5.D.6 *The County shall support the development of parking areas near access to hiking and equestrian trails.*

Policy 5.D.7 *The County shall, where appropriate, require new development to provide sheltered public transit stops, with turnouts.*

Implementation Programs

1. *Review development projects for compliance with the goals, policies and specific discussions contained in the Transportation and Circulation Section and throughout the Plan.*

   Responsible Agency/Department: Land development Departments, Board of Supervisors
   Time frame: Ongoing
   Funding: Application fees

4. *Develop funding sources for road-adjacent trails.*

   Responsible Agency/Department: Facility Services
   Time frame: Ongoing
   Funding: General Fund/Fees

9. *The County shall require that bikeways recommended in the Bikeways/Trails Master Plan be developed when street frontage improvements are required of new development.*

   Responsible Agency/Department: Department of Public Works
   Time frame: Ongoing
   Funding: Developer fees, Application Fees

None of the proposed land use map alternatives are expected to result in conflicts with existing or future pedestrian or bicycle uses. The reader is referred to Section 4.11 (Public Services and Utilities) and **Figure 3.0-9** regarding proposed trail system improvements associated with the Community Plan. Thus, the proposed Martis Valley Community Plan is expected to have a less than significant impact on pedestrian or bicycle uses.

Mitigation Measures

None required.

4.4.4 CUMULATIVE SETTING, IMPACTS AND MITIGATION MEASURES

CUMULATIVE SETTING

The cumulative setting associated with the traffic analysis consists of planned and proposed development in the Town of Truckee, Placer and Nevada County associated with their general plans in the Martis Valley area as well as regional traffic volume

conditions anticipated in the year 2021 associated with Interstate 80, SR 89 and the Tahoe Basin.

CUMULATIVE IMPACTS AND MITIGATION MEASURES

Impact 4.4.7 Cumulative Impacts to Area Intersections and Roadways

PP Depending upon the roadway network and analysis period, intersection and roadway Level of Service (LOS) standards are forecast to be exceeded under full development of the Proposed Land Use Diagram and other regional development under year 2021 conditions for area roadway facilities in the Town of Truckee and Placer County. Exceedence of LOS standards in the Town of Truckee or Placer County would be considered a **cumulative significant** impact.

AA Depending upon the roadway network and analysis period, intersection and roadway Level of Service (LOS) standards are forecast to be exceeded under full development of the Existing Martis Valley General Plan Land Use Map and other regional development under year 2021 conditions for area roadway facilities in the Town of Truckee and Placer County. Exceedence of LOS standards in the Town of Truckee or Placer County would be considered a **cumulative significant** impact.

AB Depending upon the roadway network and analysis period, intersection and roadway Level of Service (LOS) standards are forecast to be exceeded under full development of the Alternative 1 Land Use Map and other regional development under year 2021 conditions for area roadway facilities in the Town of Truckee and Placer County. Exceedence of LOS standards in the Town of Truckee or Placer County would be considered a **cumulative significant** impact.

AC Depending upon the roadway network and analysis period, intersection and roadway Level of Service (LOS) standards are forecast to be exceeded under full development of the Alternative 2 Land Use Map and other regional development under year 2021 conditions for area roadway facilities in the Town of Truckee and Placer County. Exceedence of LOS standards in the Town of Truckee or Placer County would be considered a **cumulative significant** impact.

PP-AC Proposed Land Use Diagram and Alternatives AA through AC

As described in Section 4.4.3 and under Impacts 4.4.1 and 4.4.2, cumulative development and traffic conditions in the year 2021 for summer and winter peak conditions were modeled to determine impacts to area intersections and roadways. As identified under Impacts 4.4.1 and 4.4.2, these impacts were identified as **significant**.

Mitigation Measures

Implementation of mitigation measures MM 4.4.1a and/or b and MM 4.4.2a and b would reduce Community Plan impacts to the impacted roadway facilities identified. While impacts to local residential roadways would be mitigated, cumulative impacts to regional intersections and roadways would remain **significant and unavoidable** given the

unknown nature of the timing and funding of these improvements under the three jurisdictions (Placer County, Town of Truckee and Caltrans).

Impact 4.4.8 Cumulative Impacts to Regional Highway Facilities

PP Full development of the Proposed Land Use Diagram and other regional development is expected to add to year 2021 traffic volumes along Interstate 80 and State Route 89 (north of Interstate 80). While State Route 89 (north of Interstate 80) is anticipated to operate properly, Interstate 80 is expected to operate deficiently. This would be a **cumulative significant** impact.

AA Full development of the Existing Martis Valley General Plan Land Use Map and other regional development is expected to add to year 2021 traffic volumes along Interstate 80 and State Route 89 (north of Interstate 80). While State Route 89 (north of Interstate 80) is anticipated to operate properly, Interstate 80 is expected to operate deficiently. This would be a **cumulative significant** impact.

AB Full development of the Alternative 1 Land Use Map and other regional development is expected to add to year 2021 traffic volumes along Interstate 80 and State Route 89 (north of Interstate 80). While State Route 89 (north of Interstate 80) is anticipated to operate properly, Interstate 80 is expected to operate deficiently. This would be a **cumulative significant** impact.

AC Full development of the Alternative 2 Land Use Map and other regional development is expected to add to year 2021 traffic volumes along Interstate 80 and State Route 89 (north of Interstate 80). While State Route 89 (north of Interstate 80) is anticipated to operate properly, Interstate 80 is expected to operate deficiently. This would be a **cumulative significant** impact.

PP Proposed Land Use Diagram

Traffic volumes are expected to increase on I-80 and SR 89 to the north of I-80 with the implementation of the Proposed Land Use Diagram land uses. Specifically, the 2021 peak-hour traffic volumes along I-80 both east and west of SR 267 are expected to increase by ~~15~~ 14 percent with the implementation of the Proposed Land Use Diagram above the volumes that could be expected with no future development in Martis Valley. According to the Interstate 80 Transportation Concept Report, I-80 is expected to operate at LOS F by 2017 with no improvements. Traffic volumes along SR 89 north of I-80 are expected to increase by ~~9~~ 12 percent in 2021 with the implementation of the Proposed Land Use Diagram. However, this portion of SR 89 is expected to operate at LOS A under year 2021 conditions. The Proposed Land Use Diagram is expected to contribute approximately 24 percent to total future traffic growth along I-80 within the project vicinity and 30 percent to the total future traffic growth along SR 89 north at the Town of Truckee line between now and 2021.

AA Existing Martis Valley General Plan Land Use Map

Traffic volumes are expected to increase on I-80 and SR 89 to the north of I-80 with the implementation of the Existing Martis Valley General Plan Land Use Map. Specifically, the 2021 peak-hour traffic volumes along I-80 both east of west of SR 267 are expected to increase by 20 percent with the implementation of the Existing Martis Valley General Plan Land Use Map above the volumes that could be expected with no future development in Martis Valley. According to the Interstate 80 Transportation Concept Report, I-80 is expected to operate at LOS F by 2017 with no improvements. Traffic volumes along SR 89 north of I-80 are expected to increase by 9 percent in 2021 with the implementation of the Existing Martis Valley General Plan Land Use Map. However, this portion of SR 89 is expected to operate at LOS A under year 2021 conditions.

AB Alternative 1 Land Use Map

Traffic volumes are expected to increase on I-80 and SR 89 to the north of I-80 with the implementation of the Alternative 1 Land Use Map. Specifically, the 2021 peak-hour traffic volumes along I-80 east and west of SR 267 are expected to increase by 17 and 18 percent, respectively, with the implementation of the Alternative 1 Land Use Map above the volumes that could be expected with no future development in Martis Valley. According to the Interstate 80 Transportation Concept Report, I-80 is expected to operate at LOS F by 2017 with no improvements. Traffic volumes along SR 89 north of I-80 are expected to increase by 9 percent in 2021 with the implementation of the Alternative 1 Land Use Map. However, this portion of SR 89 is expected to operate at LOS A under year 2021 conditions.

AC Alternative 2 Land Use Map

Traffic volumes are expected to increase on I-80 and SR 89 to the north of I-80 with the implementation of the Alternative 2 Land Use Map. Specifically, the 2021 peak-hour traffic volumes along I-80 both east of west of SR 267 are expected to increase by 15 percent with the implementation of the Alternative 2 Land Use Map above the volumes that could be expected with no future development in Martis Valley. According to the Interstate 80 Transportation Concept Report, I-80 is expected to operate at LOS F by 2017 with no improvements. Traffic volumes along SR 89 north of I-80 are expected to increase by 8 percent in 2021 with the implementation of the Alternative 2 Land Use Map. However, this portion of SR 89 is expected to operate at LOS A under year 2021 conditions.

Mitigation Measures

There are currently no programmed improvements or funding for improvements to the mainline of Interstate 80 and such improvements are not under control of the County. Given the unknown nature of the timing and funding of improvements this impact is considered **significant and unavoidable**.

Impact 4.4.9 Cumulative Roadway Hazards Because of Design or Incompatible Uses

PP Implementation of the Proposed Land Use Diagram is not expected to contribute to significant traffic hazards. This is considered a **less than significant** impact.

AA Implementation of the Existing Martis Valley General Plan Land Use Map is not expected to contribute to significant traffic hazards. This is considered a **less than significant** impact.

AB Implementation of the Alternative 1 Land Use Map is not expected to contribute to significant traffic hazards. This is considered a **less than significant** impact.

AC Implementation of the Alternative 2 Land Use Map is not expected to contribute to significant traffic hazards. This is considered a **less than significant** impact.

PP-AC Proposed Land Use Diagram and Alternatives AA through AC

As identified in Section 4.4.3 and Impact 4.4.3, overall accident rates for the regional roadway system are not unduly high. In addition, there are no specific design features that result in undue accident patterns. Several proposed policies address the need to minimize hazards that could result from poor roadway design or incompatible land uses, such as proposed Policies 5.A.2 and 5.A.4. In addition to these policies, the County maintains standards that govern new street construction and access to ensure that improvements are implemented in accordance with safe design standards. The Martis Valley Community Plan Update is not expected to result in a significant impact on parking capacity on an area-wide basis, as parking supply is a requirement addressed at the individual development project approval level.

Mitigation Measure

None required.

Impact 4.4.10 Cumulative Conflicts with Transit, Pedestrian and Bicycle Uses

PP Implementation of the Proposed Land Use Diagram is not expected to contribute to conflicts with transit. This is considered a **less than significant** impact.

AA Implementation of the Existing Martis Valley General Plan Land Use Map is not expected to contribute to conflicts with transit, pedestrian and bicycle uses. This is considered a **less than significant** impact.

AB Implementation of the Alternative 1 Land Use Map is not expected to contribute to conflicts with transit, pedestrian and bicycle uses. This is considered a **less than significant** impact.

AC Implementation of the Alternative 2 Land Use Map is not expected to contribute to conflicts with transit, pedestrian and bicycle uses. This is considered a **less than significant** impact.

PP-AC Proposed Land Use Diagram and Alternatives AA through AC

As identified in Section 4.4.3 and in Impacts 4.4.5 and 4.4.6, the proposed Community Plan includes several provisions ensuring that adequate facilities are provided and no conflicts with transit, pedestrian and bicycle uses occur. This cumulative impact is considered less than significant.

Mitigation Measure

None required.

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